WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4/22/13
API #: 47-033-05675

Farm name: Hill, David W. and Suellen Operator Well No.: Koonse Unit 2H

LOCATION: Elevation: 1,150' Quadrangle: Salem

District: Tenmile County: Harrison
Latitude: 15,543' Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude 3,535' Feet West of 80 Deg. 30 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	460'	460'	639 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2,718'	2,718'	1107 Cu. Ft. Class A
Date Permit Issued: 10/26/2012	5-1/2" 20#	14,567'	14,567'	3532 Cu. Ft. Class H
Date Well Work Commenced: 10/28/12				
Date Well Work Completed: 2/22/2013	2-3/8" 4.7#	7497'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7461' TVD (deepest point drilled)				
Total Measured Depth (ft): 14,567' MD, 7372' TVD (BHL)				
Fresh Water Depth (ft.): 390'				
Salt Water Depth (ft.): 1797'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 415', 487', 553', 660'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,388 TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow N/A B
Final open flow 3,465 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3800 psig (surface pressure) after ---- Hours

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Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature Date 5/2/13

33-05675

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Haymond NW Unit 2H API#47-033-05236). Please reference the wireline logs submitted with Form WR-35 for Haymond NW Unit 2H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7971' - 14,504' MD (1,224 holes)

Frac'd w/ 9,000 gals 15% HCL Acid, 173,332 bbls Slick Water carrying 963,800# 100 mesh, 3,761,100# 40/70 sand and 2,381,900# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Big Lime	est. 2238'		2282'
Big Injun	est. 2283'		2722'
Gantz Sand	est. 2723'		2831'
Fifty Foot Sandstone	est. 2832'		2930'
Gordon	est. 2931'		3275'
Fifth Sandstone	est. 3276'		3335'
Bayard	est. 3336'		3845'
Speechley	est. 3846'		4244'
Balltown	est. 4245'		4698'
Bradford	est. 4699'		5219'
Benson	est. 5220'		5522'
Alexander	est. 5523'		5564'
Elk	est. 5665'		6888'
Sycamore	6889'		7076'
Middlesex	7077'		7222'
Burket	7223'		7246'
Tully	7247'		7336'
Hamilton	7337'		7387'
Marcellus	7388'		7464' TVD

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State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4/22/13
API #: 47-033-05674

Farm name: Hill, David W. and Suellen Operator Well No.: Koonse Unit 1H

LOCATION: Elevation: 1,150' Quadrangle: Salem

District: Tenmile County: Harrison
Latitude: 15,536' Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude 3,542' Feet West of 80 Deg. 30 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	60 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	452'	452'	628 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2,733'	2,733'	1113 Cu. Ft. Class A
Date Permit Issued: 10/26/2012	5-1/2" 20#	14,655'	14,655'	3552 Cu. Ft. Class H
Date Well Work Commenced: 10/28/12				
Date Well Work Completed: 2/22/2013	2-3/8" 4.7#	7497'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7464' TVD (deepest point drilled)				
Total Measured Depth (ft): 14,655' MD, 7392' TVD (BHL)				
Fresh Water Depth (ft.): 135'				
Salt Water Depth (ft.): 1783'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 415', 487', 553', 660'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,353' TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 9,993 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3800 psig (surface pressure) after ---- Hours

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Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature Date 5/2/13

33-05674

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Haymond NW Unit 2H API#47-033-05236). Please reference the wireline logs submitted with Form WR-35 for Haymond NW Unit 2H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7867' - 14,590' MD (1,440 holes)

Frac'd w/ 10,500 gals 15% HCL Acid, 140,486 bbls Slick Water carrying 420,700# 100 mesh, 7,594,300# 40/70 sand and 1,389,500# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Big Lime	est. 2238'		2282'
Big Injun	est. 2283'		2722'
Gantz Sand	est. 2723'		2831'
Fifty Foot Sandstone	est. 2832'		2930'
Gordon	est. 2931'		3275'
Fifth Sandstone	est. 3276'		3335'
Bayard	est. 3336'		3845'
Speechley	est. 3846'		4244'
Balltown	est. 4245'		4698'
Bradford	est. 4699'		5219'
Benson	est. 5220'		5522'
Alexander	est. 5523'		5564'
Elk	est. 5665'		6223'
Rhinestreet	6224'		6760'
Sycamore	6761'		6999'
Middlesex	7000'		7155'
Burket	7156'		7187'
Tully	7188'		7296'
Hamilton	7297'		7352'
Marcellus	7353'		7464' TVD

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Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4/22/13
API #: 47-033-05617

Farm name: Yeager, Charles E. Operator Well No.: Asbury Unit 1H

LOCATION: Elevation: 1350' Quadrangle: West Milford

District: Union County: Harrison
Latitude: 5,099' Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude 9,704' Feet West of 80 Deg. 27 Min. 30 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	51 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	352'	352'	489 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2,575'	2,575'	1048 Cu. Ft. Class A
Date Permit Issued: 6/6/2012	5-1/2" 20#	13,962'	13,962'	3404 Cu. Ft. Class H
Date Well Work Commenced: 10/17/12				
Date Well Work Completed: 2/10/13	2-3/8" 4.7#	7377'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7164' TVD (deepest point drilled)				
Total Measured Depth (ft): 13,962' MD, 7105' TVD (BHL)				
Fresh Water Depth (ft.): 103'				
Salt Water Depth (ft.): None reported off this pad				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 178', 257', 295'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,118 TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow N/A Bbl
Final open flow 9,672 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3600 psig (surface pressure) after ---- Hours

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Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Katie Kosta
Signature

5/2/13
Date

33-05617

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Stutler Unit 1H API#47-033-05586). Please reference the wireline logs submitted with Form WR-35 for Stutler Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7395' - 13,897' MD (1,152 holes)

Frac'd w/ 8,500 gals 15% HCL Acid, 168,442 bbls Slick Water carrying 1,008,436# 100 mesh,

3,877,566# 40/70 sand and 2,230,535# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Big Lime	est. 1714'		1826'
Big Injun	est. 1827'		2099'
Gantz Sand	est. 2100'		2223'
Fifty Foot Sandstone	est. 2224'		2343'
Gordon	est. 2344'		2624'
Fifth Sandstone	est. 2625'		2673'
Bayard	est. 2674'		3325'
Speechley	est. 3326'		3531'
Balltown	est. 3532'		4081'
Bradford	est. 4082'		4652'
Benson	est. 4653'		4843'
Alexander	est. 4844'		5035'
Elk	est. 5036'		5631'
Rhinestreet	5632'		6387'
Sycamore	6388'		6896'
Burket	6897'		6923'
Tully	6924'		7045'
Hamilton	7046'		7117'
Marcellus	7118'		7164'

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State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4/22/13
API #: 47-033-05618

Received
Office of Oil & Gas
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Farm name: Yeager, Charles E. Operator Well No.: Asbury Unit 2H

LOCATION: Elevation: 1350' Quadrangle: West Milford

District: Union County: Harrison
Latitude: 5,094' Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude 9,691' Feet West of 80 Deg. 27 Min. 30 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	339'	339'	471 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2,562'	2,562'	1043 Cu. Ft. Class A
Date Permit Issued: 6/6/2012	5-1/2" 20#	13,970'	13,970'	3416 Cu. Ft. Class H
Date Well Work Commenced: 10/17/2012				
Date Well Work Completed: 2/4/2013	2-3/8" 4.7#	7214'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7178' TVD (deepest point drilled)				
Total Measured Depth (ft): 13,970' MD, 7117' TVD (BHL)				
Fresh Water Depth (ft.): 137'				
Salt Water Depth (ft.): None reported off this pad				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 178', 257', 295'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,134 TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 7,092 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3600 psig (surface pressure) after ---- Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Katie Koster 5/2/13
Signature Date

33.05618

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Stutler Unit 1H API#47-033-05586). Please reference the wireline logs submitted with Form WR-35 for Stutler Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7329' - 13,905' MD (1,368 holes)

Frac'd w/ 10,076 gals 15% HCL Acid, 134,411 bbls Slick Water carrying 667,538# 100 mesh, 2,563,773# 40/70 sand and 1,529,492# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Lime	est. 1714'	1826'
Big Injun	est. 1827'	2099'
Gantz Sand	est. 2100'	2223'
Fifty Foot Sandstone	est. 2224'	2343'
Gordon	est. 2344'	2624'
Fifth Sandstone	est. 2625'	2673'
Bayard	est. 2674'	3325'
Speechley	est. 3326'	3531'
Balltown	est. 3532'	4081'
Bradford	est. 4082'	4652'
Benson	est. 4653'	4843'
Alexander	est. 4844'	5035'
Elk	est. 5036'	6918'
Burket	6919'	6947'
Tully	6948'	7057'
Hamilton	7058'	7133'
Marcellus	7134'	7178' TVD

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4/18/13
API #: 47-017-06076

Farm name: Erwin, John F. Operator Well No.: Erwin Unit 1H

LOCATION: Elevation: 1,223' Quadrangle: New Milton 7.5'

District: New Milton County: Doddridge
Latitude: 242' Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude 10,961' Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	1258'	1258'	1748 Cu. Ft. Class A
Inspector: Douglas Newlon	9-5/8" 36#	2,638'	2,638'	1074 Cu. Ft. Class A
Date Permit Issued: 4/2/2012	5-1/2" 20#	16,914'	16,914'	4196 Cu. Ft. Class H
Date Well Work Commenced: 6/16/12				
Date Well Work Completed: 2/14/2013	2-3/8" 4.7#	7395'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7278' TVD				
Total Measured Depth (ft): 16,914' MD				
Fresh Water Depth (ft.): 233'				
Salt Water Depth (ft.): 1265', 1939'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None Reported				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7119' TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 8,461 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3950 psig (surface pressure) after ---- Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

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MAY - 7 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

5/2/13
Date

17-06076

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Tom's Fork Unit 2H API#47-017-06082). Please reference the wireline logs submitted with Form WR-35 for Tom's Fork Unit 2H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7,529' - 16,849' MD (1,944 holes)

Frac'd w/ 14,000 gals 15% HCL Acid, 202,083 bbls Slick Water carrying 964,700# 100 mesh, 3,836,500# 40/70 sand and 2,164,000# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Lime	est.2251'	2343'
Big Injun	est. 2344'	2750'
Fifty Foot Sandstone	est. 2751'	2948'
Gordon	est. 2949'	3306'
Fifth Sandstone	est. 3307'	4131'
Balltown	est. 4132'	4771'
Bradford	est. 4772'	5230'
Benson	est. 5231'	5487'
Alexander	est. 5488'	6719'
Sycamore	6720'	6877'
Middlesex	6878'	7013'
Burket	7014'	7047'
Tully	7048'	7118'
Marcellus	7119'	7278' TVD

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4/11/13
API #: 47-017-06081

Farm name: Erwin, John F. Operator Well No.: Toms Fork Unit 1H

LOCATION: Elevation: 1,223' Quadrangle: New Milton 7.5'

District: New Milton County: Doddridge
Latitude: 222' Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude 10,963' Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	840'	840'	1167 Cu. Ft. Class A
Inspector: Douglas Newlon	9-5/8" 36#	2,754	2,754'	1725 Cu. Ft. Class A
Date Permit Issued: 6/6/2012	5-1/2" 20#	16,113'	16,113'	3941 Cu. Ft. Class H
Date Well Work Commenced: 6/25/12				
Date Well Work Completed: 1/25/2013	Cement Plug		Set @ 1700'	491 Cu. Ft.
Verbal Plugging: N/A				
Date Permission granted on: N/A	2-3/8" 4.7#		7257'	
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7270' TVD				
Total Measured Depth (ft): 16,113' MD				
Fresh Water Depth (ft.): 233'				
Salt Water Depth (ft.): 1900'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None Reported				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,134' TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 4,393 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3950 psig (surface pressure) after ---- Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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Office of Oil & Gas
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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

5/2/13
Date

17-06081

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Tom's Fork Unit 2H API#47-017-06082). Please reference the wireline logs submitted with Form WR-35 for Tom's Fork Unit 2H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7291' - 16,047' MD (1,800 holes)

Frac'd w/ 13,000 gals 15% HCL Acid, 186,038 bbls Slick Water carrying 888,089# 100 mesh, 3,564,200# 40/70 sand and 1,979,200# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Lime	est.2251'	2343'
Big Injun	est. 2344'	2750'
Fifty Foot Sandstone	est. 2751'	2948'
Gordon	est. 2949'	3306'
Fifth Sandstone	est. 3307'	4131'
Balltown	est. 4132'	4771'
Bradford	est. 4772'	5230'
Benson	est. 5231'	5487'
Alexander	est. 5488'	6723'
Sycamore	6724'	6884'
Middlesex	6885'	7027'
Burket	7028'	7054'
Tully	7055'	7133'
Marcellus	7134'	7270' TVD

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4/18/13
API #: 47-017-06082

Farm name: Erwin, John F. Operator Well No.: Toms Fork Unit 2H

LOCATION: Elevation: 1,223' Quadrangle: New Milton 7.5'

District: New Milton County: Doddridge
Latitude: 212' Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude 10,964' Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	716'	716'	995 Cu. Ft. Class A
Inspector: Douglas Newlon	9-5/8" 36#	2640'	2640'	1075 Cu. Ft. Class A
Date Permit Issued: 6/6/2012	5-1/2" 20#	16,077'	16,077'	3965 Cu. Ft. Class H
Date Well Work Commenced: 6/26/12				
Date Well Work Completed: 1/18/2013	2-3/8" 4.7#	7366'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7299' TVD				
Total Measured Depth (ft): 16,077' MD				
Fresh Water Depth (ft.): 233'				
Salt Water Depth (ft.): 1900'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None Reported				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,144' TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow N/A B
Final open flow 7,603 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3950 psig (surface pressure) after ---- Hours

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MAY - 7 2013

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

5/2/13
Date

17-06082

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL,Photo Density/Compensated Neutron/ Gamma Ray, Gamma Ray/Dual Laterlog

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7365' - 15,850' MD (1,800 holes)

Frac'd w/ 13,000 gals 15% HCL Acid, 187,523 bbls Slick Water carrying 823,600# 100 mesh, 3,326,400# 40/70 sand and 1,874,600# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Big Lime	2251'		2343'
Big Injun	2344'		2750'
Fifty Foot Sandstone	2751'		2948'
Gordon	2949'		3306'
Fifth Sandstone	3307'		4131'
Balltown	4132'		4771'
Bradford	4772'		5230'
Benson	5231'		5487'
Alexander	5488'		6736'
Sycamore	6737'		6895'
Middlesex	6896'		7043'
Burket	7044'		7068'
Tully	7069'		7143'
Marcellus	7144'		7299' TVD

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 4/22/13
API #: 47-017-06126

Farm name: Erwin, John Operator Well No.: Erwin Unit 2HA

LOCATION: Elevation: 1,223' Quadrangle: New Milton 7.5'

District: New Milton County: Doddridge
Latitude: 232' Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude 10,962' Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	421'	421'	585 Cu. Ft. Class A
Inspector: Douglas Newlon	9-5/8" 36#	2,549'	2,549'	1038 Cu. Ft. Class A
Date Permit Issued: 8/29/2012	5-1/2" 20#	16,303'	16,303'	4055 Cu. Ft. Class H
Date Well Work Commenced: 10/8/12				
Date Well Work Completed: 2/4/2013	2-3/8" 4.7#	7319'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7269' TVD				
Total Measured Depth (ft): 16,303' MD				
Fresh Water Depth (ft.): 233'				
Salt Water Depth (ft.): 1804'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None Reported				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,128' TVD (Top)
Gas: Initial open flow —— MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 5,933 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3950 psig (surface pressure) after —— Hours

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MAY - 7 2013

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature Date 5/2/13

17-06226

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Tom's Fork Unit 2H API#47-017-06082). Please reference the wireline logs submitted with Form WR-35 for Tom's Fork Unit 2H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7384' - 16,237' MD (1,872 holes)

Frac'd w/ 13,000 gals 15% HCL Acid, 192,759 bbls Slick Water carrying 950,500# 100 mesh, 3,601,500# 40/70 sand and 1,807,400# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Big Lime	est.2251'		2343'
Big Injun	est. 2344'		2750'
Fifty Foot Sandstone	est. 2751'		2948'
Gordon	est. 2949'		3306'
Fifth Sandstone	est. 3307'		4131'
Balltown	est. 4132'		4771'
Bradford	est. 4772'		5230'
Benson	est. 5231'		5487'
Alexander	est. 5488'		6729'
Sycamore	6730'		6881'
Middlesex	6882'		7024'
Burket	7025'		7056'
Tully	7057'		7127'
Marcellus	7128'		7269' TVD

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WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2-15-13
API #: 47-001-103128
1-03128

Farm name: EVERSON, BERNARD & MACEL Operator Well No.: B823

LOCATION: Elevation: 1976 Quadrangle: BELINGTON 7 1/2

District: BARKER County: BARBOUR
Latitude: 9500 Feet South of 39 Deg. 05 Min. 00 Sec.
Longitude 5150 Feet West of 79 Deg. 57 Min. 30 Sec.

Company: BERRY ENERGY, INC

Address: 310 STILE STREET	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
CLARKSBURG, WV 26302	9 5/8	48	48	CONDUCTOR
Agent: DAVID BERRY	7	888	888	TO SURFACE
Inspector: JOE McCOURT	4 1/2	5272.05	5272.05	200 SKS
Date Permit Issued: 04/21/2010				
Date Well Work Commenced: 01/25/12				
Date Well Work Completed: 01/31/12				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 5438 (LOG TD)				
Total Measured Depth (ft): 5438 (LOG TD)				
Fresh Water Depth (ft.): 125, 235, 1309				
Salt Water Depth (ft.): NONE				
Is coal being mined in area (N/Y)? NONE				
Coal Depths (ft.): 210, 295, 605, 1142				
Void(s) encountered (N/Y) Depth(s) NONE				

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OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation HAVERTY, BENSON Pay zone depth (ft) 5113, 3910
Gas: Initial open flow ODOR MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 360 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 1100 psig (surface pressure) after 72 Hours

Second producing formation 5th sand Pay zone depth (ft) 2428
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

David A. Berry
Signature

2-15-13
Date

1-3128

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes X_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list PLATFORM EXPRESS

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: Haverty 14 hole (.39) 5113-5152, Benson 14 holes (.39) 3910-3933, 5th Sand 14 holes (.39) 2428-2442,5th sand 15 holes (.39) 2196-2206

Stimulation: haverty - 500 gal 15% HCl 46,500# 20/40 sand BD 2790#, ATP 3528#, 1072 Bbls foam

benson - 500 gal 15% HCl 40,200# 20/40 sand BD 4870#, ATP 3094#, 880 Bbls foam

5th sand - 500 gal 15% HCl 4,900#80/100 sand, 39,700# 40/70 sand BD 5081#, ATP 3305#, 923 Bbls foam

5th sand- 500 gal 15% HCl 42,100# 20/40 sand, BD 1883#, ATP 2826#, 803 Bbls foam

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth / Bottom Depth
Sand and Shale	0 / 334
Sandstone	334 / 358
Sand and Shale	358 / 742
Red Rock	742 / 980
Sand and Shale	980 / 1260
Big Lime	1260 / 1500
Sand and Shale	1500 / 2118
shale	2118 / 2210
5th Sand	2210 / 2310
Sand and Shale	2310 / 3910
Benson	3910 / 3920
Sand and Shale	3920 / 5273
Haverty	5273 / 5333
Shale	5333 / 5438 Logger TD

WR-35
Rev (5-01)

DATE:

API # : 47-013-04612

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

ORIGINALLY MAILED: 6/1/10

COPY

Well Operator's Report of Well Work

Farm name: Bruce Jett Operator Well No.: Jett #1

LOCATION: Elevation: 878 Quadrangle: Tariff

District: Washington County: Calhoun
Latitude: 8325 Feet South of 38 Deg. 45 Min. 00 Sec.
Longitude 4200 Feet West of 81 Deg. 7 Min. 3- Sec.

Company: Boggs Natural Gas, FLP

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1248 Charleston Road	13-7/8"			
Spencer, WV 25276				
Agent: Harry C. Boggs	9-5/8"	591'	591'	
Inspector:				
Date Permit Issued: 6/9/2006	7"	1942'	1942'	Surface
Date Well Work Commenced: 5/27/08				
Date Well Work Completed: 6/01/08				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 5485				
Fresh Water Depth (ft.): 1115				
Salt Water Depth (ft.): 1735				
Is coal being mined in area (N/Y)? NO				
Coal Depths (ft.):				

OPEN FLOW DATA

Producing formation Shale Pay zone depth (ft) 2200
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

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NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Boggs Natural Gas, FLP
By: [signature]
Date: 4/27/10

13.04612

FORMATIONS:

0 - 60	Soil & Sandy Shale
60 - 200	Sand & Shale
200 - 230	Sand
230 - 500	SAnd & Shale
500 - 600	Red Rock & Shale
600 - 1100	Sand & Shale
1100 - 1160	Salt Sand (Wet)
1160 - 1700	Sand & Shale
1700 - 1780	Salt Sand (Wet 1-1/2" Salt water)
1780 - 1906	Sand
1906 - 1936	Little Lime
1936 - 1946	Red Rock
1946 - 1980	Big Lime
1980 - 2450	Sand & Shale
2450 - 5485	Devonian Shale

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 11-12-2012
API #: 47-1502877
015-02877

Farm name: King, Charles P. Operator Well No.: 26

LOCATION: Elevation: 972 Quadrangle: Elkhurst

District: Union County: Clay
Latitude: 0 Feet South of 38 Deg. 26 Min. 37.3 Sec.
Longitude 0 Feet West of 81 Deg. 12 Min. 10.3 Sec.

Company: Rouzer Oil Company

Address: P.O. Box 987 Spencer, WV 25276	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	9 5/8"	351'	351'	110
Agent: James Hildreth	7"	1527'	1527'	247
Inspector: Ed Gainer	4 1/2"	1929'	1929'	70
Date Permit Issued: 12-05-2011				
Date Well Work Commenced: 06-13-2012				
Date Well Work Completed: 04-22-2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 1925'				
Total Measured Depth (ft): 1925'				
Fresh Water Depth (ft.): 125'				
Salt Water Depth (ft.): 1100'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Big Injun Sand Pay zone depth (ft) 1845
Gas: Initial open flow 75 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 25 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 80 psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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Office of Oil & Gas
MAY - 6 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

5-3-2013
Date

IS-02877

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 42 holes between 1,845' to 1,859'

Stimulation: Sand fracture consisting of 947 bbls. of water and 92,300 lbs. of sand with breakdown pressure of 3,103 psi and maximum treating pressure of 2,034 psi

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

See attached.

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GEOLOGICAL RECORD OF KING NO. 26

15-02877

Formation	Depth
Soil	0 – 60
Sand	60 – 184
Slate	184 – 220
Shale	220 – 270
Sand	270 – 310
Slate	310 – 370
Sand	370 – 420
Coal	420 – 464
Slate	464 – 510
Sand	510 – 560
Slate	560 – 610
Sand	610 – 660
Sand	660 – 710
Slate	710 – 760
Shell/Slate	760 – 810
Sand/Slate	810 – 840
Sand/Slate	840 – 870
Slate	870 – 900
Slate	900 – 930
Sand	930 – 970
Sand	970 – 1000
Sand	1000 – 1030
Sand	1030 – 1060
Sand	1060 – 1100
Sand/Shale	1100 – 1120
Sand/Shale	1120 – 1190
Sand	1190 – 1322
Sand	1322 – 1380
Sand/Shale	1380 – 1420
Sand	1420 – 1472
Red Rock /Salt Sand	1472 – 1586
Maxon Sand	1586 – 1634
Little Lime	1634 – 1700
Pencil Cave	1700 – 1710
Big Lime	1710 – 1780
Keener Sand	1780 – 1816
Big Injun	1816 – 1866
Red Rock	1866 – 1929

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 3-18-2013
API #: 47-1706033

Farm name: Eli M. Gaston, et ux Operator Well No.: 512492

LOCATION: Elevation: 1,155 Quadrangle: Oxford

District: Southwest County: Doddridge, WV
Latitude: 39.177208 Feet South of ____ Deg. 39 Min. 12 Sec.
Longitude -80.811958 Feet West of West Deg. 80 Min. 47 Sec.

Company: EQT Production Company

Address: EQT Plaza, Suite 1700	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	45.31
Agent: Cecil Ray	13 3/8	944	944	876
Inspector: David Scranage	9 5/8	3,148	3,148	1,312.5
Date Permit Issued: 11-4-2011	5 1/2	10,073	10,073	1,524.5
Date Well Work Commenced: 4-29-2012				
Date Well Work Completed: 6-22-12				
Verbal Plugging: N/A				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 6,564				
Total Measured Depth (ft): 10,075				
Fresh Water Depth (ft.): 449				
Salt Water Depth (ft.): 1,142				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 1,294, 1,328, 1,422				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6,525
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow 7,763 MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure 1,150 psig (surface pressure) after ____ Hours

Second producing formation N/A Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

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MAR 29 2013
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Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3-18-2013
Date

17-06033

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Geophysical

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See Attachment

Plug Back Details Including Plug Type and Depth(s):

N/A

Formations Encountered: Top Depth / Bottom Depth
Surface:

Sand/Shale / 0 / 1294 / 1294 -- Coal / 1294 / 1300 / 6 / -- Sand/Shale / 1300 / 1328 / 28 --
Coal / 1328 / 1332 / 4 -- Sand/Shale / 1332 / 1422 / 90 -- Coal / 1422 / 1428 / 6 -- Sand/Shale / 1428 / 1686 / 258
Maxton / 1686 / 1861 / 101 -- Big Lime / 1861 / 1923 / 62 -- Big Injun / 1923 / 2086 / 163
Weir / 2086 / 2345 / 259 -- Gantz / 2345 / 2465 / 12- -- Fifty Foot / 2465 / 2553 / 88
Thirty Foot / 2553 / 2607 / 54 -- Gordon / 2607 / 2700 / 93 -- 4th / 2700 / 2872 / 172 --
5th / 2872 / 2918 / 46 -- Bayard / 2918 / 3213 / 295 -- Warren / 3213 / 3284 / 71 --
Speechley / 3284 / 3817 / 533 -- Balltown A / 3817 / 4162 / 345 -- Bradford / 4162 / 4731 / 569 --
Riley / 4731 / 4812 / 81 -- Benson / 4812 / 5059 / 247 -- Alexander / 5059 / 6183 / 1124 --
Sonyea / 6183 / 6335 / 152 -- Middlesex / 6335 / 6386 / 51 -- Genesee / 6386 / 6456 / 70 --
Geneseo / 6456 / 6498 / 42 -- Tully / 6498 / 6516 / 18 -- Hamilton / 6516 / 6525 / 9 --
Marcellus Black Shale / 6525 / 6539 / 14 -- Purcell / 6539 / 6564 / 25 -- Cherry Valley / 6564

512492

17-06033

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
1	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/25/2012	9771 - 9951		6,260.00	7,255.00	5 Min: 2360
					10 Min: 2177
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2080
87.10	8,687.00	3,066.00	0.92		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
405,715.00	9,416.00		2,000.00		
Stage	**Formation**	**Frac Type**			
2	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/26/2012	9471 - 9713		6,494.00	7,908.00	5 Min: 2779
					10 Min: 2661
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2429
92.40	9,074.00	5,071.00	1.23		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
345,053.00	10,879.00		750.00		
Stage	**Formation**	**Frac Type**			
3	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/27/2012	9171 - 9413		6,813.00	8,006.00	5 Min: 2643
					10 Min: 2466
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2386
84.90	8,894.00	3,557.00	1		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
389,951.00	11,724.00		750.00		

17-06033
51-2492

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
4	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/27/2012	8871 - 9113		7,411.00	7,316.00	5 Min: 2583
					10 Min: 2478
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2408
88.70	8,732.00	3,191.00	0.94		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
403,643.00	9,419.00		750.00		
Stage	**Formation**	**Frac Type**			
5	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/27/2012	8571 - 8813		6,353.00	7,115.00	5 Min: 2602
					10 Min: 2473
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2396
98.60	8,428.00	2,983.00	0.9		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
408,015.00	9,419.00		750.00		
Stage	**Formation**	**Frac Type**			
6	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/27/2012	8271 - 8511		5,501.00	7,672.00	5 Min: 2599
					10 Min: 2412
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2309
96.00	8,478.00	3,093.00	0.92		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
400,211.00	9,574.00		750.00		

17-06033
51-2492

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
7	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/28/2012	7971 - 8213		5,987.00	6,722.00	5 Min: 3004
					10 Min: 2725
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2674
96.90	7,870.00	4,129.00	1.08		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
403,583.00	9,645.00		750.00		
Stage	**Formation**	**Frac Type**			
8	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/28/2012	7671 - 7913		5,717.00	6,850.00	5 Min: 3474
					10 Min: 3015
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2795
99.50	7,270.00	4,869.00	1.2		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
404,814.00	9,378.00		750.00		
Stage	**Formation**	**Frac Type**			
9	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/28/2012	7371 - 7613		6,123.00	6,497.00	5 Min: 3219
					10 Min: 2711
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2546
91.40	7,430.00	4,112.00	1.08		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
404,006.00	9,349.00		750.00		

51-2492

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
10	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/28/2012	7071 - 7313		6,862.00	7,309.00	5 Min: 2732
					10 Min: 2600
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2529
90.90	9,150.00	3,418.00	0.97		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
385,765.00	9,793.00		750.00		
Stage	**Formation**	**Frac Type**			
11	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/29/2012	6771 - 7013		5,304.00	6,608.00	5 Min: 2757
					10 Min: 2642
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 2570
99.70	7,116.00	3,204.00	0.94		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
404,016.00	9,417.00		750.00		

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 3-18-2013
API #: 47-10302677

Farm name: John W. & Florence E. Kilcoyne Operator Well No.: 513755

LOCATION: Elevation: 857 Quadrangle: Big Run

District: Grant County: Wetzel, WV
Latitude: 39.56053 Feet South of ____ Deg. 39 Min. 35 Sec.
Longitude -80.56012 Feet West of West Deg. 80 Min. 32 Sec.

Company: EQT Production Company

Address: EQT Plaza, Suite 1700	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
625 Liberty Avenue, Pittsburgh, PA 15222	20	42	42	74.34
Agent: Cecil Ray	16	301	301	389.4
Inspector: David Scrange	13 3/8	815.09	815.09	309.6
Date Permit Issued: 7-14-2011	9 5/8	3,058.54	5,058.54	1,415.2
Date Well Work Commenced: 2-14-2012	5 1/2	10,933	10,933	1,475.4
Date Well Work Completed: 6-27-2012				
Verbal Plugging: N/A				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 7,038				
Total Measured Depth (ft): 10,985				
Fresh Water Depth (ft.): 222				
Salt Water Depth (ft.): 1,440				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 411, 594, 612				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,012
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow 8,517 MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure 1,536 psig (surface pressure) after ____ Hours

Second producing formation N/A Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

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MAR 29 2013
WV Department of
Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3-18-2013
Date

103-2677

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Geophysical

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See Attachment

Plug Back Details Including Plug Type and Depth(s):

N/A

Formations Encountered: Top Depth / Bottom Depth
Surface:

Sand/Shale / 0 / 411 / 411 -- Coal / 411 / 417 / 6 -- Sand/Shale / 417 / 594 / 177 -- Coal / 594 / 601 / 7 --
Sand/Shale / 601 / 612 / 11 -- Coal / 612 / 618 / 6 -- Sand/Shale / 618 / 1638 / 1020 -- Maxton / 1638 / 1693 / 55 --
Big Lime / 1693 / 1864 / 171 -- Big Injun -- / 1864 / 2142 / 278 -- Weir / 2142 / 2194 / 52 --
Top Devonian / 2194 / 2353 / 159 -- Gantz / 2353 / 2399 / 46 -- Fifty Foot / 2399 / 2501 / 102 -- Thirty Foot / 2501 / 2590 / 89 --
Gordon / 2590 / 2667 / 77 -- Forth Sand / 2667 / 2791 / 124 -- Bayard / 2791 / 3310 / 519 / --
Warren / 3310 / 3358 / 48 -- B5 / 3358 / 3463 / 105 -- Speechley / 3463 / 3874 / 411 --
Balltown / 3874 / 4340 / 466 -- Riley / 4340 / 4986 / 646 -- Benson / 4986 / 5326 / 340 --
Alexander / 5326 / 6554 / 1228 -- Sonyea / 6554 / 6724 / 170 -- Middlesex / 6724 / 6776 / 52 --
Genesee / 6776 / 6860 / 84 -- Geneseo / 6860 / 6893 / 33 -- Tully / 6893 / 6923 / 30 --
Hamilton / 6923 / 7012 / 89 -- Marcellus / 7012 / 7022 / 10 -- Purcell / 7022 / 7038 / 16 --
Cherry Valley / 7038

513755

103-02677

EQT WR-35	Completion	Attachment	Well	Treatment	Summary

Stage	Formation	Frac Type			
1	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/21/2012	10672 - 10914		9,628.00	8,064.00	5 Min: 3889
					10 Min: 3761
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3698
89.70	8,589.00	4,434.00	1.07		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
405,436.00	10,474.00		2,000.00		

Stage	Formation	Frac Type			
2	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/21/2012	10373 - 10643		7,656.00	8,101.00	5 Min: 3814
					10 Min: 3688
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3608
91.70	8,788.00	4,227.00	1.04		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
405,791.00	9,393.00		750.00		

Stage	Formation	Frac Type			
3	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/22/2012	10072 - 10314		7,821.00	8,187.00	5 Min: 3938
					10 Min: 3823
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3750
95.70	8,979.00	4,281.00	1.05		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
401,330.00	9,493.00		750.00		

103-02677
51-3755

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
4	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/22/2012	9772 - 10114		7,495.00	8,127.00	5 Min: 3829
					10 Min: 3704
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3631
96.60	8,624.00	4,231.00	1.05		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
401,718.00	9,430.00		750.00		
Stage	**Formation**	**Frac Type**			
5	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/22/2012	9472 - 9714		7,979.00	7,989.00	5 Min: 3849
					10 Min: 3754
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3700
94.50	8,603.00	4,310.00	1.06		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
402,646.00	9,239.00		750.00		
Stage	**Formation**	**Frac Type**			
6	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/23/2012	9172 - 9414		8,060.00	7,961.00	5 Min: 3899
					10 Min: 3804
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3746
94.80	8,521.00	4,267.00	1.05		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
406,424.00	9,313.00		750.00		

51-3755 103-02677

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
7	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/23/2012	8872 - 9114		7,580.00	7,731.00	5 Min: 3900
					10 Min: 3791
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3725
98.90	8,378.00	4,248.00	1.05		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
404,039.00	9,118.00		750.00		
Stage	**Formation**	**Frac Type**			
8	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/23/2012	8572 - 8814		7,260.00	7,742.00	5 Min: 3944
					10 Min: 3838
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3783
99.20	8,536.00	4,301.00	1.06		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
398,967.00	9,350.00		750.00		
Stage	**Formation**	**Frac Type**			
9	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/26/2012	8272 - 8314		7,684.00	7,713.00	5 Min: 3919
					10 Min: 3841
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3792
97.80	8,453.00	4,261.00	1.05		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
401,349.00	8,913.00		750.00		

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51-3755

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
10	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/27/2012	7972 - 8214		7,365.00	7,201.00	5 Min: 3901
					10 Min: 3897
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3796
99.90	9,282.00	4,294.00	1.06		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
400,921.00	8,798.00		750.00		
Stage	**Formation**	**Frac Type**			
11	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/27/2012	7672 - 7914		7,389.00	7,401.00	5 Min: 3898
					10 Min: 3818
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3775
99.90	8,461.00	4,351.00	1.06		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
405,788.00	9,231.00		750.00		
Stage	**Formation**	**Frac Type**			
12	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/27/2012	7372 - 7612		7,418.00	6,966.00	5 Min: 3961
					10 Min: 3888
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3844
100.10	8,535.00	4,181.00	1.04		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
402,576.00	9,178.00		750.00		

103.02677
51-3755

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
13	MARCELLUS	Slickwater			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
4/27/2012	7207 - 7329		7,468.00	7,357.00	5 Min: 3976
					10 Min: 3905
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min: 3862
99.20	8,496.00	4,757.00	1.07		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
199,453.00	4,415.00		750.00		

WR-35
Rev (5-01)

DATE: 3-1-2010
API #: 47-33-05161

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Galvan, Jane & C. Terneus Operator Well No.: Galvan #1

LOCATION: Elevation: 1149' Quadrangle: Brownton 7.5

District: Simpson County: Harrison
Latitude: 1550 Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude 3550 Feet West of 80 Deg. 12 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1331 Lamar, Suite 1080	13 3/8"	30'		Sand
Houston, Texas 77010	9 5/8"		336'	105
Agent: William M. Herlihy	7"		1992'	323
Inspector: Tim Bennett	4 ½"		4500'	246
Date Permit Issued: 9/22/08	2 7/8"		3938'	none
Date Well Work Commenced: 1/22/09				
Date Well Work Completed: 5/06/09				
Verbal Plugging:				
Date Permission granted on: 1/20/09				
Rotary X Cable Rig				
Total Depth (feet): 4639				
Fresh Water Depth (ft.): 98,383, 518				
Salt Water Depth (ft.): 1965				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 104-106				

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JUN 12 2013
WV Department of
Environmental Protection

OPEN FLOW DATA

Producing formation Benson Sand Pay zone depth (ft) 4358-62
Gas: Initial open flow 34 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 606 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 1650 psig (surface pressure) after 96 Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow____MCF/d Oil: Initial open flow _____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Randy Sleet
By:
Date: 3/1/10

33-05161

Galvan #1 47-33-05161

Fill	Brown	Soft	0-6	
Shale	Gray	Med	6--12	
Red Rock	Red	Med	12--16	
Sandy & Shale	Gray	Med	16-98	
Shale	Gray	Soft	98-104	damp @ 98'
Coal	Black	Soft	104-106	
Sandy Shale	Gray	Med	106-231	
Sand	Gray	Med	231-270	
Shale	Gray	Soft	270-305	3" stream @ 3031
Sand	Gray	Med	305-318	
Sandy Shale	Gray	Med	318-510	
Shale	Gray	Soft	510-518	damp @ 518'
Sand & Shale	Gray	Med	518-850	
Sand	Light Gray	Med	850-1022	
Sandy Shale	Gray	Med	1022-1430	
Big Lime	Dark Gray	Hard	1430-1482	
Big Injun	Brown	Hard	1482-1598	
Sandy Shale	Gray	Soft	1598-1876	
Gantz Sand	Light Gray	Hard	1876-1922	2 1/2" Brine @ 1965'
Sand & Shale	Gray	Med	1922 2134	
Gordon Sand	Gray	Hard	2134-2146	
Shale & Sand	Gray	Med	2146-2382	
Fifth Sand	Gray	Hard	2382-2423	
Sandy Shale	Gray	Med	2423-2883	
Sand	Gray	Med	2883-2895	
Sandy Shale	Gray	Med	2895-4358	
Sand	Gray	Hard	4358-4400	
Sandy Shale	Gray	Med	4400-4639	

33-05161

Galvan Frac.txt

Benson Sand Perforations: 4358-4362 with 12 Holes

broke down w/500 gal. 15% HCL Acid, Fraced w/63.400# 30/50 sand, 2002 Bbls. Sand Laden Fluid.

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: April 11, 2013
API #: 47-051-01520

Farm name: Wayne Operator Well No.: 1H

LOCATION: Elevation: 1354' Quadrangle: New Martinsville 7.5'

District: Franklin County: Marshall
Latitude: 1540 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 6650 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main Street, Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"		110'	CTS
Agent: Michael McCown	13-3/8"		1146'	1046
Inspector: Bill Hendershot	9-5/8"		2534'	1103
Date Permit Issued: 1/13/2012	5-1/2"		12620'	3450
Date Well Work Commenced: 3/12/2012	2-3/8"		6552'	
Date Well Work Completed: 8/26/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary [X] Cable [ ] Rig [ ]				
Total Vertical Depth (ft): 6,617'				
Total Measured Depth (ft): 12,620'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 890-910; 1031-1041				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6617'
Gas: Initial open flow 1560 MCF/d Oil: Initial open flow 74 Bbl/d
Final open flow 3026 MCF/d Final open flow 133 Bbl/d
Time of open flow between initial and final tests 216 Hours
Static rock Pressure 1975 psig (surface pressure) after 216 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Received
Office of Oil & Gas
APR 12 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

4-11-13
Date

51-01520

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, Mudlog, Acousti, Density, Induction, Mech. Prop.& XMAC

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See attached page:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth / Bottom Depth
SEWICKLEY COAL: 890 - 910	GENESEO: 6750 - 6797
PITTSBURGH COAL: 1031 - 1041	TULLY: 6797 - 6872
MAXTON: 2009 - 2059	HAMILTON: 6872 - 6921
BIG LIME: 2082 - 2112	MARCELLUS: 6921 - 6974
BIG INJUN: 2122	ONONDAGA: 6974 - n/a (TD'd before base)
BASE OF BIG INJUN: 2256	
WEIR: 2441 - 2611	
BEREA: 2629 - 2869	
GORDON: 2964 - 2994	
BENSON: 3668 - 3678	
JAVA: 5291 - 5611	
RHINESTREET: 6137 - 6473	
CASHAQUA: 6473 - 6605	
MIDDLESEX: 6605 - 6639	
WEST RIVER: 6639 - 6750	

51-015320

Fluid & Sand Volume Summary - Wayne #1H

Date	Stage	Perforated interval From ft	To ft	Fluid Type	Frac Fluid bbls	Pump Down bbls	100 mesh lbs	40/70 M lbs	Total Sand lbs	Avg Inj BPM
7/16/2012	1	12434	12524	slk wtr	4283	0	46982	150236	197218	82
7/17/2012	2	12154	12364	slk wtr	7632	370	93979	246361	340340	80
7/18/2012	3	11854	12064	slk wtr	6933	398	94007	254660	348667	80
7/19/2012	4	11554	11764	slk wtr	7008	367	94008	243491	337499	81
7/20/2012	5	11254	11464	slk wtr	7344	370	95050	292541	387591	81
7/21/2012	6	10954	11164	slk wtr	7384	346	93907	295682	389589	83
7/22/2012	7	10654	10864	slk wtr	7234	453	94031	294750	388781	82
7/23/2012	8	10354	10564	slk wtr	7392	295	93752	257665	351417	80
7/26/2012	9	10054	10264	slk wtr	7860	266	95910	229296	325206	80
7/27/2012	10	9754	9964	slk wtr	7622	231	95045	174436	269481	80
7/29/2012	11	9454	9664	slk wtr	6482	219	91323	175625	266948	80
7/30/2012	12	9154	9364	slk wtr	6776	270	94122	185209	279331	80
8/1/2012	13	8854	9064	slk wtr	6420	195	94484	124444	218928	80
8/2/2012	14	8554	8764	slk wtr	7426	147	77584	230170	307754	80
8/3/2012	15	8254	8464	slk wtr	7568	126	79202	218538	297740	81
8/4/2012	16	7954	8164	slk wtr	6297	144	78623	117816	196439	80
8/5/2012	17	7654	7864	slk wtr	7420	77	79309	214142	293451	81
8/6/2012	18	7354	7564	slk wtr	7655	75	80135	235053	315188	80
8/7/2012	19	6904	7254	slk wtr	6647	72	76161	181286	257447	80
	Totals				**133383**	**4421**	**1647614**	**4121401**	**5769015**	

Water to Recover **137804 bbls**

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: April 11, 2013
API #: 47-051-01521

Farm name: Wayne - North Operator Well No.: 2H

LOCATION: Elevation: 1354' Quadrangle: New Martinsville 7.5'

District: Franklin County: Marshall
Latitude: 1555 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 6635 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main Street, Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"		110'	CTS
Agent: Michael McCown	13-3/8"		1147'	1046
Inspector: Bill Hendershot	9-5/8"		2535'	1077
Date Permit Issued: 1/13/2012	5-1/2"		12122'	3394
Date Well Work Commenced: 3/23/2012	2-3/8"		6478'	
Date Well Work Completed: 8/26/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,618'				
Total Measured Depth (ft): 12,124'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 890-910; 1031-1041				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6618'
Gas: Initial open flow 1872 MCF/d Oil: Initial open flow 73 Bbl/d
Final open flow 2595 MCF/d Final open flow 168 Bbl/d
Time of open flow between initial and final tests 216 Hours
Static rock Pressure 1800 psig (surface pressure) after 216 Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

Received
Office of Oil & Gas
APR 12 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

4-11-13
Date

51-01521

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, Mudlog, Acousti, Density, Induction, Mech. Prop.& XMAC

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See attached page:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface: Top Depth / Bottom Depth

SEWICKLEY COAL: 890 - 910	GENESEO: 6750 - 6797
PITTSBURGH COAL: 1031 - 1041	TULLY: 6797 - 6872
MAXTON: 2009 - 2059	HAMILTON: 6872 - 6921
BIG LIME: 2082 - 2112	MARCELLUS: 6921 - 6974
BIG INJUN: 2122	ONONDAGA: 6974 - n/a (TD'd before base)
BASE OF BIG INJUN: 2256	
WEIR: 2441 - 2611	
BEREA: 2629 - 2869	
GORDON: 2964 - 2994	
BENSON: 3668 - 3678	
JAVA: 5291 - 5611	
RHINESTREET: 6137 - 6473	
CASHAQUA: 6473 - 6605	
MIDDLESEX: 6605 - 6639	
WEST RIVER: 6639 - 6750	

Received
Office of Oil & Gas
APR 12 2013

51-015-21

Fluid & Sand Volume Summary - Wayne #2H

Date	Stage	Perforated interval From ft	Perforated interval To ft	Fluid Type	Frac Fluid bbls	Pump Down bbls	100 mesh lbs	40/70 M lbs	Total Sand lbs	Avg Inj BPM
7/16/2012	1	11939	12029	slk wtr	4018		47034	151607	198641	81
7/17/2012	2	11659	11869	slk wtr	7758	340	93968	297306	391274	81
7/19/2012	3	11359	11569	slk wtr	6798	362	94072	238672	332744	81
7/20/2012	4	11059	11269	slk wtr	6754	350	76087	276136	352223	80
7/21/2012	5	10759	10969	slk wtr	7195	310	93977	296968	390945	83
7/22/2012	6	10459	10669	slk wtr	6575	321	93953	208121	302074	83
7/23/2012	7	10159	10369	slk wtr	7591	287	94453	297124	391577	80
7/24/2012	8	9859	10069	slk wtr	8789	255	94830	282122	376952	80
7/25/2012	9	9559	9769	slk wtr	9268	214	93454	209103	302557	80
7/26/2012	10	9259	9469	slk wtr	8362	217	96516	234642	331158	80
7/27/2012	11	8959	9169	slk wtr	7688	211	94330	253129	347459	80
7/29/2012	12	8659	8869	slk wtr	6704	382	92564	124058	216622	81
7/30/2012	13	8359	8569	slk wtr	6704	159	94078	237198	331276	80
7/31/2012	14	8059	8269	slk wtr	7970	171	93569	298902	392471	81
8/1/2012	15	7759	7969	slk wtr	7962	117	93393	252542	345935	81
8/2/2012	16	7459	7669	slk wtr	7990	107	78846	307850	386696	81
8/3/2012	17	7159	7369	slk wtr	6858	83	78269	177391	255660	81
8/4/2012	18	6859	7069	slk wtr	7174	58	78873	259786	338659	81
	Totals				**132158**	**3944**	**1582266**	**4402657**	**5984923**	

Water to Recover **136102 bbls**

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: April 11, 2013
API #: 47-051-01522

Farm name: Wayne - South Operator Well No.: 3H

LOCATION: Elevation: 1354' Quadrangle: New Martinsville 7.5'

District: Franklin County: Marshall
Latitude: 1565 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 6620 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main Street, Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"		110'	CTS
Agent: Michael McCown	13-3/8"		1147'	1046
Inspector: Bill Hendershot	9-5/8"		2528'	1075
Date Permit Issued: 1/13/2012	5-1/2"		12103'	3394
Date Well Work Commenced: 4/4/2012	2-3/8"		6445'	
Date Well Work Completed: 8/26/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,610'				
Total Measured Depth (ft): 12,104'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 890-910; 1031-1041				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6610'
Gas: Initial open flow 1512 MCF/d Oil: Initial open flow 90 Bbl/d
Final open flow 3096 MCF/d Final open flow 126 Bbl/d
Time of open flow between initial and final tests 216 Hours
Static rock Pressure 1800 psig (surface pressure) after 216 Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____ MCF/d Oil: Initial open flow_____ Bbl/d
Final open flow_____ MCF/d Final open flow_____ Bbl/d
Time of open flow between initial and final tests_____ Hours
Static rock Pressure_____ psig (surface pressure) after_____ Hours

Received
Office of Oil & Gas
APR 12 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

4-11-13
Date

51-01522

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, Mudlog, Acousti, Density, Induction, Mech. Prop.& XMAC

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See attached page:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth / Bottom Depth	Formations Encountered: Surface:	Top Depth / Bottom Depth
SEWICKLEY COAL:	890 - 910	GENESEO:	6750 - 6797
PITTSBURGH COAL:	1031 - 1041	TULLY:	6797 - 6872
MAXTON:	2009 - 2059	HAMILTON:	6872 - 6921
BIG LIME:	2082 - 2112	MARCELLUS:	6921 - 6974
BIG INJUN:	2122	ONONDAGA:	6974 - n/a (TD'd before base)
BASE OF BIG INJUN:	2256		
WEIR:	2441 - 2611		
BEREA:	2629 - 2869		
GORDON:	2964 - 2994		
BENSON:	3668 - 3678		
JAVA:	5291 - 5611		
RHINESTREET:	6137 - 6473		
CASHAQUA:	6473 - 6605		
MIDDLESEX:	6605 - 6639		
WEST RIVER:	6639 - 6750		

51-015322

Fluid & Sand Volume Summary - Wayne #3H

Date	Stage	Perforated interval From ft	Perforated interval To ft	Fluid Type	Frac Fluid bbls	Pump Down bbls	100 mesh lbs	40/70 M lbs	Total Sand lbs	Avg Inj BPM
7/16/2012	1	11934	12024	slk wtr	4100		48043	149031	197074	83
7/17/2012	2	11659	11869	slk wtr	7236	397	94110	283734	377844	82
7/19/2012	3	11359	11569	slk wtr	7408	721	93905	296065	389970	81
7/20/2012	4	11059	11269	slk wtr	7699	371	94048	310250	404298	82
7/21/2012	5	10759	10969	slk wtr	7352	326	95069	292209	387278	83
7/22/2012	6	10459	10669	slk wtr	7328	309	94005	278441	372446	82
7/23/2012	7	10159	10369	slk wtr	7018	288	93834	271760	365594	80
7/24/2012	8	9859	10069	slk wtr	7885	264	95096	299187	394283	81
7/25/2012	9	9559	9769	slk wtr	8841	212	95200	281974	377174	80
7/26/2012	10	9259	9469	slk wtr	7303	230	94520	134656	229176	80
7/28/2012	11	8959	9169	slk wtr	7300	201	94740	283847	378587	80
7/30/2012	12	8659	8869	slk wtr	7094	206	93484	297057	390541	80
7/31/2012	13	8359	8569	slk wtr	6694	153	94187	205027	299214	80
8/1/2012	14	8059	8269	slk wtr	6616	151	78884	124913	203797	81
8/2/2012	15	7759	7969	slk wtr	6969	121	79200	207608	286808	80
8/3/2012	16	7459	7669	slk wtr	5887	87	80251	85627	165878	81
8/4/2012	17	6959	7309	slk wtr	6931	73	79346	202986	282332	81
	Totals				**119661**	**4110**	**1497922**	**4004372**	**5502294**	

Water to Recover **123771 bbls**

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: April 11, 2013
API #: 47-051-01523

Farm name: Wayne - South Operator Well No.: 4H

LOCATION: Elevation: 1354' Quadrangle: New Martinsville 7.5'

District: Franklin County: Marshall
Latitude: 1580 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 6605 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main Street, Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"		110'	CTS
Agent: Michael McCown	13-3/8"		1145'	994
Inspector: Bill Hendershot	9-5/8"		2527'	1071
Date Permit Issued: 1/13/2012	5-1/2"		12244'	3428
Date Well Work Commenced: 4/20/2012	2-3/8"		6544'	
Date Well Work Completed: 8/26/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary [X] Cable [ ] Rig [ ]				
Total Vertical Depth (ft): 6,612'				
Total Measured Depth (ft): 12,270'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 890-910; 1031-1041				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6612'
Gas: Initial open flow 1848 MCF/d Oil: Initial open flow 100 Bbl/d
Final open flow 2904 MCF/d Final open flow 212 Bbl/d
Time of open flow between initial and final tests 216 Hours
Static rock Pressure 1800 psig (surface pressure) after 216 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Received
Office of Oil & Gas
APR 12 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

4-11-13
Date

51-01523

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, Mudlog, Acousti, Density, Induction, Mech. Prop.& XMAC

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See attached page:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

SEWICKLEY COAL: 890 - 910	GENESEO: 6750 - 6797
PITTSBURGH COAL: 1031 - 1041	TULLY: 6797 - 6872
MAXTON: 2009 - 2059	HAMILTON: 6872 - 6921
BIG LIME: 2082 - 2112	MARCELLUS: 6921 - 6974
BIG INJUN: 2122	ONONDAGA: 6974 - n/a (TD'd before base)
BASE OF BIG INJUN: 2256	
WEIR: 2441 - 2611	
BEREA: 2629 - 2869	
GORDON: 2964 - 2994	
BENSON: 3668 - 3678	
JAVA: 5291 - 5611	
RHINESTREET: 6137 - 6473	
CASHAQUA: 6473 - 6605	
MIDDLESEX: 6605 - 6639	
WEST RIVER: 6639 - 6750	

Received
Office of Oil & Gas
APR 12 2013

51-015243

Fluid & Sand Volume Summary - Wayne #4H

Date	Stage	Perforated interval From ft	Perforated interval To ft	Fluid Type	Frac Fluid bbls	Pump Down bbls	100 mesh lbs	40/70 M lbs	Total Sand lbs	Avg Inj BPM
7/16/2012	1	12066	12156	slk wtr	4100		48043	149031	197074	83
7/17/2012	2	11786	11996	slk wtr	7236	397	94110	283734	377844	82
7/19/2012	3	11486	11696	slk wtr	7408	721	93905	296065	389970	81
7/20/2012	4	11186	11396	slk wtr	7699	371	94048	310250	404298	81
7/21/2012	5	10886	11096	slk wtr	7352	326	95069	292209	387278	82
7/22/2012	6	10586	10796	slk wtr	7328	309	94005	278441	372446	81
7/23/2012	7	10286	10496	slk wtr	7018	288	93834	271760	365594	81
7/24/2012	8	9986	10196	slk wtr	7885	264	95096	299187	394283	81
7/25/2012	9	9686	9896	slk wtr	8841	212	95200	281974	377174	80
7/28/2012	10	9386	9596	slk wtr	7303	230	94520	134656	229176	80
7/29/2012	11	9086	9296	slk wtr	7300	201	94740	283847	378587	80
7/30/2012	12	8786	8996	slk wtr	7094	206	93484	297057	390541	80
7/31/2012	13	8486	8696	slk wtr	6694	153	94187	205027	299214	80
8/4/2012	14	8186	8396	slk wtr	6616	151	78884	124913	203797	80
8/5/2012	15	7886	8096	slk wtr	6969	121	79200	207608	286808	81
8/5/2012	16	7586	7796	slk wtr	5887	87	80251	85627	165878	81
8/6/2012	17	7286	7496	slk wtr	6931	73	79346	202986	282332	81
8/6/2012	18	7006	7196	slk wtr	6978	52	79746	221686	301432	80
	Totals				**126639**	**4162**	**1577668**	**4226058**	**5803726**	

Water to Recover **130801 bbls**

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: April 11, 2013
API #: 47-051-01553

Farm name: Lily - South Operator Well No.: 3H

LOCATION: Elevation: 1272' Quadrangle: New Martinsville 7.5'

District: Franklin County: Marshall
Latitude: 4590 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 4195 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main Street, Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"		110'	CTS
Agent: Michael McCown	13-3/8"		1177'	1071
Inspector: Bill Hendershot	9-5/8"		2528'	1079
Date Permit Issued: 6/1/2012	5-1/2"		12436'	3486
Date Well Work Commenced: 8/22/2012	2-3/8"		6616'	
Date Well Work Completed: 12/17/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,503'				
Total Measured Depth (ft): 12,461'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 898-918; 1077-1087				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6503'
Gas: Initial open flow 1560 MCF/d Oil: Initial open flow 103 Bbl/d
Final open flow 2376 MCF/d Final open flow 128 Bbl/d
Time of open flow between initial and final tests 264 Hours
Static rock Pressure 1728 psig (surface pressure) after 264 Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

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Office of Oil & Gas
APR 12 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

4-11-13
Date

51-01553

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list
GR, Mudlog, Acousti, Density, Induction, Mech. Prop.& XMAC

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See attached page:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

SEWICKLEY COAL: 898 - 918	GENESEO: 6702 - 6741
PITTSBURGH COAL: 1077 - 1087	TULLY: 6741 - 6806
MAXTON: 1971 - 2039	HAMILTON: 6806 - 6898
BIG LIME: 2040 - 2070	MARCELLUS: 6898 - 6951
BIG INJUN: 2079	ONONDAGA: 6951 - n/a (TD'd before base)
BASE OF BIG INJUN: 2180	
WEIR: 2418 - 2588	
BEREA: 2597 - 2837	
GORDON: 2903 - 2933	
BENSON: 3600 - 3610	
JAVA: 5200 - 5520	
RHINESTREET: 6124 - 6465	
CASHAQUA: 6465 - 6582	
MIDDLESEX: 6582 - 6615	
WEST RIVER: 6615 - 6702	

51-015553

Fluid & Sand Volume Summary - Lily #3H

Date	Stage	Perforated interval From ft	Perforated interval To ft	Fluid Type	Frac Fluid bbls	Pump Down bbls	100 mesh lbs	40/70 M lbs	Total Sand lbs	Avg Inj BPM
11/10/2012	1	12276	12300	slk wtr	3264	393	27510	93492	121002	81
11/11/2012	2	12147	12237	slk wtr	6428	380	78280	217995	296275	80
11/13/2012	3	11862	12112	slk wtr	7752	341	77535	163792	241327	80
11/14/2012	4	11562	11812	slk wtr	7069	305	77510	282187	359697	80
11/15/2012	5	11262	11512	slk wtr	7230	308	77701	282851	360552	81
11/16/2012	6	10962	11212	slk wtr	7178	296	77695	283661	361356	81
11/17/2012	7	10662	10912	slk wtr	6961	267	77619	285156	362775	82
11/18/2012	8	10362	10612	slk wtr	6620	243	78509	281902	360411	80
11/19/2012	9	10062	10312	slk wtr	7033	221	78124	285749	363873	81
11/20/2012	10	9762	10012	slk wtr	6945	196	77490	283975	361465	82
11/21/2012	11	9462	9712	slk wtr	7036	200	77664	282696	360360	81
11/24/2012	12	9162	9412	slk wtr	6946	160	79264	281606	360870	82
11/25/2012	13	8862	9112	slk wtr	6810	172	78142	281969	360111	81
11/26/2012	14	8562	8812	slk wtr	6766	207	78372	279473	357845	82
11/27/2012	15	8262	8512	slk wtr	6871	151	77626	278093	355719	80
11/28/2012	16	7962	8212	slk wtr	6760	142	77534	279768	357302	80
11/29/2012	17	7662	7912	slk wtr	6809	108	68529	257617	326146	80
11/20/2012	18	7362	7612	slk wtr	6802	90	75097	263713	338810	80
12/1/2012	19	7252	7322	slk wtr	6921	62	77535	269611	347146	80
	Totals				**128201**	**4242**	**1417736**	**4935306**	**6353042**	

Water to Recover **132443 bbls**

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: April 11, 2013
API #: 47-051-01554

Farm name: Lily - North Operator Well No.: 4H

LOCATION: Elevation: 1272' Quadrangle: New Martinsville 7.5'

District: Franklin County: Marshall
Latitude: 4575 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 4210 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main Street, Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"		110'	CTS
Agent: Michael McCown	13-3/8"		1151'	1046 - OK
Inspector: Bill Hendershot	9-5/8"		2492'	1097
Date Permit Issued: 6/1/2012	5-1/2"		12111'	3486
Date Well Work Commenced: 9/4/2012	2-3/8"		6600'	
Date Well Work Completed: 12/17/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,512'				
Total Measured Depth (ft): 12,142'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 898-918; 1077-1087				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6512'
Gas: Initial open flow 1872 MCF/d Oil: Initial open flow 115 Bbl/d
Final open flow 1656 MCF/d Final open flow 128 Bbl/d
Time of open flow between initial and final tests 264 Hours
Static rock Pressure 1635 psig (surface pressure) after 264 Hours

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Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____ MCF/d Oil: Initial open flow_____ Bbl/d
Final open flow_____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests_____ Hours
Static rock Pressure_____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

4-11-13
Date

51-01554

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, Mudlog, Acousti, Density, Induction, Mech. Prop.& XMAC

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See attached page:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth / Bottom Depth
SEWICKLEY COAL: 898 - 918	GENESEO: 6702 - 6741
PITTSBURGH COAL: 1077 - 1087	TULLY: 6741 - 6806
MAXTON: 1971 - 2039	HAMILTON: 6806 - 6898
BIG LIME: 2040 - 2070	MARCELLUS: 6898 - 6951
BIG INJUN: 2079	ONONDAGA: 6951 - n/a (TD'd before base)
BASE OF BIG INJUN: 2180	
WEIR: 2418 - 2588	
BEREA: 2597 - 2837	
GORDON: 2903 - 2933	
BENSON: 3600 - 3610	
JAVA: 5200 - 5520	
RHINESTREET: 6124 - 6465	
CASHAQUA: 6465 - 6582	
MIDDLESEX: 6582 - 6615	
WEST RIVER: 6615 - 6702	

Fluid & Sand Volume Summary - Lily #4H

Date	Stage	Perforated interval From ft	Perforated interval To ft	Fluid Type	Frac Fluid bbls	Pump Down bbls	100 mesh lbs	40/70 M lbs	Total Sand lbs	Avg Inj BPM
11/10/2012	1	11973	11997	slk wtr	3177	460	27742	90138	117880	80
11/11/2012	2	11824	11914	slk wtr	7077	333	77885	285268	363153	80
11/12/2012	3	11539	11789	slk wtr	6980	345	77041	272071	349112	80
11/13/2012	4	11440	11488	slk wtr	6077	287	77881	110523	188404	80
11/15/2012	5	11338	11390	slk wtr	6534	299	78169	197681	275850	81
11/16/2012	6	10733	11300	slk wtr	7055	294	77617	283508	361125	81
11/17/2012	7	10535	10655	slk wtr	7056	265	77629	285195	362824	80
11/18/2012	8	10041	10470	slk wtr	6534	238	77544	284985	362529	80
11/19/2012	9	9786	9908	slk wtr	7000	191	77032	282871	359903	80
11/20/2012	10	9598	9718	slk wtr	6833	228	77742	265155	342897	82
11/21/2012	11	9403	9553	slk wtr	7042	242	77022	283628	360650	81
11/24/2012	12	9208	9375	slk wtr	7384	173	77240	280786	358026	81
11/26/2012	13	8702	9055	slk wtr	6748	179	77632	247163	324795	80
11/27/2012	14	8384	8567	slk wtr	4677	206	5581	0	5581	66
11/28/2012	15	8239	8350	slk wtr	6495	191	64977	239870	304847	80
11/29/2012	16	8088	8195	slk wtr	7287	127	77832	152689	230521	81
11/30/2012	17	7287	7800	slk wtr	6992	377	77498	286161	363659	80
12/1/2012	18	7286	7800	slk wtr	6979	119	77540	280408	357948	80
	Totals				**117927**	**4554**	**1261604**	**4128100**	**5389704**	

Water to Recover **122481** **bbls**

51-01554

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 6/7/13
API #: 47-049-01980

Farm name: Rochester & Pitts. Coal Operator Well No.: Crim 2165-19H

LOCATION: Elevation: 1221' Quadrangle: Shinnston 7.5'

District: Lincoln County: Marion
Latitude: 10460' Feet South of 39 Deg. 30 Min. 00 Sec.
Longitude 2970' Feet West of 80 Deg. 17 Min. 30 Sec.

Company: XTO Energy, Inc.

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	16"	80'	80'	CTS
Agent: Gary Beall				
Inspector: Tristan Jenkins				
Date Permit Issued: 9/24/2008				
Date Well Work Commenced: 2/27/2009				
Date Well Work Completed: 3/2/2009				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 150' - Plugged				
Total Measured Depth (ft): 150' - Plugged				
Fresh Water Depth (ft.): None				
Salt Water Depth (ft.): NA				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): NA				
Void(s) encountered (N/Y) Depth(s) N				

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JUN 12 2013
WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation None - Plugged Pay zone depth (ft) NA
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

6-7-13
Date

49.01980

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list No

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

No completion - well plugged

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

Surface/Dirt/Rock 0' - 150' *Unknown Obstruction at 150'

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 3/27/13
API #: 47-49-02161-RB

Farm name: Bower, Richard and Jocelyn Operator Well No.: Brennan A 1H -RB

LOCATION: Elevation: 1256 Quadrangle: Mannington 7.5'

District: Lincoln County: Marion
Latitude: 15020 Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 1100 Feet West of 80 Deg. 17 Min. 30 Sec.

Company: XTO Energy Inc

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	20"	40'	40'	CTS
Agent: Gary Beall	13-3/8"	636'	636'	531 sx.
Inspector: Bill Hendershot	9-5/8"	3101'	3101'	1042 sx.
Date Permit Issued: 2/24/2012	5-1/2"	11309'	11309'	1650 sx.
Date Well Work Commenced: 5/1/2012				
Date Well Work Completed: 1/6/2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7655'				
Total Measured Depth (ft): 11305'				
Fresh Water Depth (ft.): 65'				
Salt Water Depth (ft.): None Noted				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 140'				
Void(s) encountered (N/Y) Depth(s) N				

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Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7530-7670
Gas: Initial open flow N/A MCF/d Oil: Initial open flow ——— Bbl/d
Final open flow 3678 MCF/d Final open flow ——— Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure ——— psig (surface pressure) after ——— Hours

Second producing formation ——— Pay zone depth (ft) ———
Gas: Initial open flow ——— MCF/d Oil: Initial open flow ——— Bbl/d
Final open flow ——— MCF/d Final open flow ——— Bbl/d
Time of open flow between initial and final tests ——— Hours
Static rock Pressure ——— psig (surface pressure) after ——— Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3-28-13
Date

49-2161

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, ROP, VS, TVD, MWD, Mud logs

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Stg 1 Marcellus; 11,022'-11236'; 60 shots; Slick water frac; Avg treating 7091 psi@ 82 bpm; 101,428 #s 100 mesh; 299,829 #s 30/50 mesh; 10022 bbl water, 0 bbl treated water

Stg 2 Marcellus; 10728'-10242'; 60 shots; Slick water frac; Avg treating 7240 psi@ 81 bpm; 100,040 #s 100 mesh; 299,882 #s 30/50 mesh; 9814 bbl water, 0 bbl treated water

Stg 3 Marcellus; 10,434'-10,648'; 60 shots; Slick water frac; Avg treating 7148 psi@ 83 bpm; 100,553 #s 100 mesh; 300,881 #s 30/50 mesh; 9797 bbl water, 0 bbl treated water

Stg 4 Marcellus; 10,140'-10354'; 60 shots; Slick water frac; Avg treating 7239 psi@ 78 bpm; 101,833 #s 100 mesh; 300,483 #s 30/50 mesh; 9920 bbl water, 0 bbl treated water

Stg 5 Marcellus; 9846'-10060'; 60 shots; Slick water frac; Avg treating 7289 psi@ 86 bpm; 104,593 #s 100 mesh; 301,007 #s 30/50 mesh; 9921 bbl water, 0 bbl treated water

Stg 6 Marcellus; 9552'-9766'; 60 shots; Slick water frac; Avg treating 7169 psi@ 83 bpm; 101,639 #s 100 mesh; 302,463 #s 30/50 mesh; 9844 bbl water, 0 bbl treated water

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth

Surface:

See attached sheet.

Brennan A 1H - RB	47-049-02161 - RB	
Formations Encountered	Top Depth	Bottom Depth
Surface:		
SS,SLT,SH	0	80
SS	80	128
SH	128	140
COAL	140	150
SS,SH	150	170
SH	170	178
SS	178	202
SS,SH	202	460
SH	460	506
SS	506	525
SS,SH	525	700
SH,SS	700	1025
SH	1025	1165
SH,SS	1165	1265
SH	1265	1830
SS	1830	2070
SH	2070	2100
SH,SS	2100	2540
SS	2540	2700
SH	2700	3160
SH,SS	3160	3420
SS,SH	3420	3540
SS	3540	3600
SS,SLTST	3600	3660
SH,SLTST,SS	3660	3800
SH,SLTST	3800	3820
SH,SLTST,SS	3820	3850
SH,SLTST	3850	3940
SLTST,SH	3940	3990
SH,SLTST	3990	4230
SH	4230	4250
SH,SLTST	4250	4650
SLTST,SH	4650	4920
SH,SLTST	4920	5130
SH	5130	5200
SH,LS	5200	5270
SH	5270	5300
SH,SLTST	5300	5360
SH	5360	5450
SH,SLTST	5450	5520
SH	5520	6030
SH,SLTST	6030	6060
SH,LS	6060	6090
SH	6090	7367
Geneseo	7367	7420
Tully	7420	7467
Hamilton	7467	7527
Marcellus	7527	11325

BRENNAN A 1H-RB

49-2161

FORMATION	TVD
BIG INJUN*	1951
BIG INJUN BASE*	2017
GREENBRIER*	2047
GREENBRIER BASE*	2081
SQUAW*	2090
SQUAW BASE*	2101
GANTZ*	2489
GANTZ BASE*	2506
50FT*	2537
50FT BASE*	2635
30FT*	2649
30FT BASE*	2698
GORDON*	2717
GORDON BASE*	2743
LWR GORDON*	2849
LWR GORDON BASE*	2892
4TH SAND*	2924
4TH SAND BASE*	2931
5TH SAND*	2983
5TH SAND BASE*	3018
LWR SPEECHLEY*	3603
LWR SPEECH. BASE*	3623
UP BALLTOWN*	3823
UP BALLTOWN BASE*	3836
BALLTOWN*	3887
BALLTOWN BASE*	3918
GENESEO SHALE	7367
GENESEO BASE	7420
TULLY LIMESTONE	7420
TULLY BASE	7467
HAMILTON SHALE	7467
HAMILTON BASE	7527
UPPER MARCELLUS	7527
UP MARCELLUS BASE	7616
PURCELL LIMESTONE	7616
PURCELL BASE	7621
LOWER MARCELLUS	7621
LO MARCELLUS BASE**	7677

* Tops projected from offset log due to air drilling and therefore not logging this section

** Base projected from offset logs due to not actually drilling through this base

Well Name: Brennan A 1H

API # . 47-049-02161

Preforated Intervals, Fracturing or Stimulating

Stg 7 Marcellus; 9258'-9472'; 60 shots; Slick water frac; Avg treating 7236 psi@ 82 bpm; 102,344 #100 mesh; 300,256 #s 30/50 mesh; 9915 bbl water, 0 bbl treated water
Stg 8 Marcellus; 8964'-9178'; 60 shots; Slick water frac; Avg treating 7300 psi@ 80 bpm; 101,343 #100 mesh; 303,364 #s 30/50 mesh; 9726 bbl water, 0 bbl treated water
Stg 9 Marcellus; 8670'-8884'; 60 shots; Slick water frac; Avg treating 7243 psi@ 80 bpm; 100,461 #100 mesh; 303,746 #s 30/50 mesh; 9634 bbl water, 0 bbl treated water
Stg 10 Marcellus; 8376'-8590'; 60 shots; Slick water frac; Avg treating 7455 psi@ 85 bpm; 101,720 #100 mesh; 299,830 #s 30/50 mesh; 9653 bbl water, 0 bbl treated water
Stg 11 Marcellus; 8082'-8296'; 60 shots; Slick water frac; Avg treating 7353 psi@ 82 bpm; 106,020 #100 mesh; 304,414 #s 30/50 mesh; 9549 bbl water, 0 bbl treated water

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 3/27/2013
API #: 47-4902162

Farm name: Bower, Richard and Jocelyn Operator Well No.: Brennan A 2H

LOCATION: Elevation: 1256 Quadrangle: Mannington 7.5

District: Lincoln County: Marion
Latitude: 15010 Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 1090 Feet West of 80 Deg. 17 Min. 30 Sec.

Company: XTO Energy Inc

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	20"	40'	40'	CTS
Agent: Gary Beall	13-3/8"	622'	622'	600 sx
Inspector: Bill Hendershot	9-5/8"	3128'	3128'	1052 sx
Date Permit Issued: 6/21/2011	5-1/2"	11949'	11949'	1735 sx
Date Well Work Commenced: 1/11/2012				
Date Well Work Completed: 1/8/2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7662'				
Total Measured Depth (ft): 11949'				
Fresh Water Depth (ft.): 65'				
Salt Water Depth (ft.): None Noted				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 140'				
Void(s) encountered (N/Y) Depth(s) N				

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Office of Oil and Gas
APR 01 2013
WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7535-7670
Gas: Initial open flow N/A MCF/d Oil: Initial open flow ---------- Bbl/d
Final open flow 891 MCF/d Final open flow ---------- Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3-28-13
Date

49-2162

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, ROP, Directional Survey, Total Gas, Mudlogs

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Stg 1 Marcellus; 11639'-11873'; 60 shots; Slick water frac; Avg treating 8254 psi@ 32 bpm; 0 #100 mesh; 5000 #s 30/50 mesh; 3304 bbl water, 0 bbl treated water

Stg 2 Marcellus; 11395'-11525'; 60 shots; Slick water frac; Avg treating 7444 psi@ 72 bpm; 106,171 #100 mesh; 305,407 #s 30/50 mesh; 106,171 bbl water, 0 bbl treated water

Stg 3 Marcellus; 11014'-11229'; 60 shots; Slick water frac; Avg treating 8147 psi@ 74 bpm; 87,700 #100 mesh; 18,100 #s 30/50 mesh; 11,295 bbl water, 0 bbl treated water

Stg 4 Marcellus; 10716'-10914'; 60 shots; Slick water frac; Avg treating 7253 psi@ 79 bpm; 107,163 #100 mesh; 307,952 #s 30/50 mesh; 13115 bbl water, 0 bbl treated water

Stg 5 Marcellus; 10430'-10616'; 60 shots; Slick water frac; Avg treating 7670 psi@ 71 bpm; 105,863 #100 mesh; 310,020 #s 30/50 mesh; 14,469 bbl water, 0 bbl treated water

Stg 6 Marcellus; 10180'-10328'; 60 shots; Slick water frac; Avg treating 7559 psi@ 68 bpm; 105,004 #100 mesh; 304,819 #s 30/50 mesh; 14,459 bbl water, 0 bbl treated water

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth

Surface:

See attached sheet.

Brennan A 2H	47-049-02162	
Formations Encountered	Top Depth	Bottom Depth
SS,SLT,SH	0	80
SS	80	128
SH	128	140
COAL	140	150
SS,SH	150	170
SH	170	178
SS	178	202
SS,SH	202	460
SH	460	506
SS	506	525
SS,SH	525	700
SH,SS	700	1025
SH	1025	1165
SH,SS	1165	1265
SH	1265	1830
SS	1830	2070
SH	2070	2100
SH,SS	2100	2540
SS	2540	2700
SH	2700	3170
SLTST,SS	3170	3220
SH,SLTST	3220	3840
SH	3840	3870
SH,SLTST	3870	3990
SH	3990	4050
SH,SLTST	4050	4110
SH,SLTST,SS	4110	4170
SH	4170	4320
SH,SLTST	4320	4350
SLTST,SS,SH	4350	4380
SH	4380	4440
SH,SLTST	4440	4470
SH	4470	4950
SH,SLTST	4950	4980
SH	4980	5220
SH, SLTST	5220	5280
SH	5280	5610
SH, SLTST	5610	5700
SH	5700	5760
SH, SLTST	5760	5790
SH	5790	5880
SH, SLTST	5880	5910
SH	5910	6480
SH,SLTST	6480	6510
SH	6510	7550
LS,SH	7550	7680
SH	7680	7720
SH,LS	7720	7790
SH	7790	8150
SH,LS	8150	8200

BRENNAN A 2H

FORMATION	TVD
BIG INJUN*	1955
BIG INJUN BASE*	2021
GREENBRIER*	2051
GREENBRIER BASE*	2085
SQUAW*	2094
SQUAW BASE*	2105
GANTZ*	2493
GANTZ BASE*	2510
50FT*	2541
50FT BASE*	2639
30FT*	2653
30FT BASE*	2702
GORDON*	2721
GORDON BASE*	2747
LWR GORDON*	2853
LWR GORDON BASE*	2896
4TH SAND*	2928
4TH SAND BASE*	2935
5TH SAND*	2987
5TH SAND BASE*	3022
LWR SPEECHLEY*	3607
LWR SPEECH. BASE*	3627
UP BALLTOWN*	3827
UP BALLTOWN BASE*	3840
BALLTOWN*	3891
BALLTOWN BASE*	3922
GENESEO SHALE	7371
GENESEO BASE	7425
TULLY LIMESTONE	7425
TULLY BASE	7469
HAMILTON SHALE	7469
HAMILTON BASE	7533
UPPER MARCELLUS	7533
UP MARCELLUS BASE	7632
PURCELL LIMESTONE	7632
PURCELL BASE	7635
LOWER MARCELLUS	7635
LO MARCELLUS BASE**	7683

* Tops projected from offset log due to air drilling and therefore not logging this section

** Base projected from offset logs due to not actually drilling through this base

SH	8200	8300
SH,LS	8300	8320
SH	8320	11995

49-2162

Well Name: Brennan A 2H

API # 47-049-02162

Preforated Intervals, Fracturing or Stimulating

Stg 7 Marcellus;9930 '-10032'; 60 shots; Slick water frac; Avg treating 7390 psi@ 73 bpm; 106,767 #100 mesh; 306,694 #s 30/50 mesh; 9628 bbl water, 0 bbl treated water
Stg 8 Marcellus; 9632'-9734'; 60 shots; Slick water frac; Avg treating 7355 psi@ 78 bpm; 102,209 #100 mesh; 305,744 #s 30/50 mesh; 9657 bbl water, 0 bbl treated water
Stg 9 Marcellus; 9337'-9439'; 60 shots; Slick water frac; Avg treating 7169 psi@ 74 bpm; 105,843 #100 mesh; 304,991 #s 30/50 mesh; 9890 bbl water, 0 bbl treated water
Stg 10 Marcellus; 9041'-9143'; 60 shots; Slick water frac; Avg treating 7281 psi@ 72 bpm; 106,241 #100 mesh; 305,053 #s 30/50 mesh; 9647 bbl water, 0 bbl treated water
Stg 11 Marcellus; 8747'-8847'; 60 shots; Slick water frac; Avg treating 7451 psi@ 82 bpm; 106,600 #100 mesh; 304,900 #s 30/50 mesh; 9735 bbl water, 0 bbl treated water
Stg 12 Marcellus; 8622'-8844'; 60 shots; Slick water frac; Avg treating 7717 psi@ 79 bpm; 106,200 #100 mesh; 305,400 #s 30/50 mesh; 9583 bbl water, 0 bbl treated water
Stg 13 Marcellus; 7602'-7635'; 60 shots; Slick water frac; Avg treating 7551 psi@ 82 bpm; 99,962 #100 mesh; 336,632 #s 30/50 mesh; 10271 bbl water, 0 bbl treated water

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 3/27/2013
API #: 47-4902166

Farm name: Bower, Richard and Jocelyn Operator Well No.: Brennan A 3H

LOCATION: Elevation: 1256 Quadrangle: Mannington 7.5

District: Lincoln County: Marion
Latitude: 1070 Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 15000 Feet West of 80 Deg. 17 Min. 30 Sec.

Company: XTO Energy Inc

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	20"	81'	81'	CTS
Agent: Gary Beall	13-3/8"	619'	619'	260 sx
Inspector: Bill Hendershot	9-5/8"	3135'	3135'	527 sx
Date Permit Issued: 9/22/2011	5-1/2"	10802'	10802'	1788 sx
Date Well Work Commenced: 11/19/2011				
Date Well Work Completed: 1/8/2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7667				
Total Measured Depth (ft): 10788				
Fresh Water Depth (ft.): 65'				
Salt Water Depth (ft.): None Noted				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 140', 440'				
Void(s) encountered (N/Y) Depth(s) N				

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Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7535-7670
Gas: Initial open flow N/A MCF/d Oil: Initial open flow ---------- Bbl/d
Final open flow 3651 MCF/d Final open flow ---------- Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3-28-13
Date

49-2166

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Stg 1 Marcellus; 10494'-10716'; 60 shots; Slick water frac; Avg treating 7394 psi@ 86 bpm; 105,643 #100 mesh; 316,520 #s 30/50 mesh; 9838 bbl water, 0 bbl treated water

Stg 2 Marcellus; 10182'-10404'; 60 shots; Slick water frac; Avg treating 7380 psi@ 81 bpm; 107,295 #100 mesh; 308,184 #s 30/50 mesh; 9941 bbl water, 0 bbl treated water

Stg 3 Marcellus; 9870'-10092'; 60 shots; Slick water frac; Avg treating 7502 psi@ 83 bpm; 88,303 #100 mesh; 241,316 #s 30/50 mesh; 8371 bbl water, 0 bbl treated water

Stg 4 Marcellus; 9558'-9780'; 60 shots; Slick water frac; Avg treating 7533 psi@ 82 bpm; 86,130 #100 mesh; 250,925 #s 30/50 mesh; 8822 bbl water, 0 bbl treated water

Stg 5 Marcellus; 9246'-9468'; 60 shots; Slick water frac; Avg treating 7426 psi@ 84 bpm; 89,018 #100 mesh; 263,303 #s 30/50 mesh; 8971 bbl water, 0 bbl treated water

Stg 6 Marcellus; 8934'-9156'; 60 shots; Slick water frac; Avg treating 7377 psi@ 84 bpm; 87,700 #100 mesh; 262,600 #s 30/50 mesh; 8818 bbl water, 0 bbl treated water

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth

Surface:

Brennan A 3H	47-049-02166	
Formation Name or Type	Top	Bottom
SS,SLT,SH	0	80
SS	80	128
SH	128	140
COAL	140	150
SS,SH	150	170
SH	170	178
SS	178	202
SS,SH	202	440
Coal	440	460
SS,SH	460	700
SH	700	770
SS,SH	770	2850
SH	2850	2890
SH,SS	2890	3152
SH,SLTST	3152	3200
SH	3200	3230
SH,SLTST	3230	3350
SLTST,SS,SH	3350	3380
SH,SLTST	3380	3440
SLTST, SH,SS	3440	3480
SH,SLTST	3480	3530
SH	3530	3560
SH,SLTST	3560	3590
SH,SS,SLTST,LS	3590	3650
SH, SLTST	3650	3740
SH	3740	3800
SH,SLTST	3800	3860
SH, tr SLST and SS	3860	3890
SH	3890	3950
SH, SLTST, SS	3950	3980
SH w/ tr SLST	3980	4040
SH and SLST	4040	4220
SH	4220	4670
SH and SLST	4670	5080
SH, SLTST, SS	5080	5110
SH and SLST	5110	5240
SH	5240	5300
SH and SLST	5300	5240
SH	5240	5300
SH and SLST	5300	5390
SH	5390	5450
SH w/ tr SLST	5450	5480
SH	5480	6590
SH and SLST	6590	6650
SH	6650	7450
LS and SH	7450	7550
SH, LS	7550	7650
SH	7650	7680
SH,LS	7680	7710
SH	7710	7870

BRENNAN A 3H

49-2166

FORMATION	TVD
BIG INJUN*	1950
BIG INJUN BASE*	2016
GREENBRIER*	2046
GREENBRIER BASE*	2080
SQUAW*	2089
SQUAW BASE*	2100
GANTZ*	2488
GANTZ BASE*	2505
50FT*	2536
50FT BASE*	2634
30FT*	2648
30FT BASE*	2697
GORDON*	2716
GORDON BASE*	2742
LWR GORDON*	2848
LWR GORDON BASE*	2891
4TH SAND*	2923
4TH SAND BASE*	2930
5TH SAND*	2982
5TH SAND BASE*	3017
LWR SPEECHLEY*	3602
LWR SPEECH. BASE*	3622
UP BALLTOWN*	3822
UP BALLTOWN BASE*	3835
BALLTOWN*	3886
BALLTOWN BASE*	3917
GENESEO SHALE	7379
GENESEO BASE	7423
TULLY LIMESTONE	7423
TULLY BASE	7466
HAMILTON SHALE	7466
HAMILTON BASE	7536
UPPER MARCELLUS	7536
UP MARCELLUS BASE	7623
PURCELL LIMESTONE	7623
PURCELL BASE	7626
LOWER MARCELLUS	7626
LO MARCELLUS BASE**	7686

* Tops projected from offset log due to air drilling and therefore not logging this section

** Base projected from offset logs due to not actually drilling through this base

SH,LS	7870	7900
SH	7900	10780

49-2166

Well Name: Brennan A 3H

API # 47-049-02166

49.2166

Preforated Intervals, Fracturing or Stimulating

Stg 7 Marcellus; 8622'-8844'; 60 shots; Slick water frac; Avg treating 7498 psi@ 85 bpm; 88,200 #100 mesh; 262,400 #s 30/50 mesh; 8794 bbl water, 0 bbl treated water
Stg 8 Marcellus; 7656'-7661'; 60 shots; Slick water frac; Avg treating 7499 psi@ 82 bpm; 106,254 #100 mesh; 3024,064 #s 30/50 mesh; 10370 bbl water, 0 bbl treated water

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 3/27/2013
API #: 47-4902209

Farm name: Bower, Richard and Jocelyn Operator Well No.: Brennan Unit A 7H

LOCATION: Elevation: 1256 Quadrangle: Mannington 7.5'

District: Lincoln County: Marion
Latitude: 15030 Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 1120 Feet West of 80 Deg. 17 Min. 30 Sec.

Company: XTO Energy Inc

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	20"	40'	40'	CTS
Agent: Gary Beall	13-3/8"	635'	635'	532 sx
Inspector: Bill Hendershot	9-5/8"	3014'	3014'	1040 sx
Date Permit Issued: 5/18/2012	5-1/2"	12999'	12999'	1910 sx
Date Well Work Commenced: 6/18/2012				
Date Well Work Completed: 1/4/13				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7588'				
Total Measured Depth (ft): 12646'				
Fresh Water Depth (ft.): 65'				
Salt Water Depth (ft.): None Noted				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 140'				
Void(s) encountered (N/Y) Depth(s) N				

RECEIVED
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APR 01 2013
WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7535-7655
Gas: Initial open flow N/A MCF/d Oil: Initial open flow ---------- Bbl/d
Final open flow 3095 MCF/d Final open flow ---------- Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3-28-13
Date

49-02209

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, ROP, Directional Survey, Total Gas, Mudlogs

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Stg 1 Marcellus; 12353'-12575'; 60 shots; Slick water frac; Avg treating 7393 psi@ 82 bpm; 105,888 #100 mesh; 313,472 #s 30/50 mesh; 9975 bbl water, 0 bbl treated water

Stg 2 Marcellus; 12048'-12270'; 60 shots; Slick water frac; Avg treating 7571 psi@ 84 bpm; 106,272 #100 mesh; 305,420 #s 30/50 mesh; 10188 bbl water, 0 bbl treated water

Stg 3 Marcellus; 11743'-11965'; 60 shots; Slick water frac; Avg treating 7429 psi@ 84 bpm; 107,161 #100 mesh; 314,993 #s 30/50 mesh; 9873 bbl water, 0 bbl treated water

Stg 4 Marcellus; 11438'-11660'; 60 shots; Slick water frac; Avg treating 7433 psi@ 86 bpm; 107,728 #100 mesh; 313,600 #s 30/50 mesh; 9919 bbl water, 0 bbl treated water

Stg 5 Marcellus; 11133'-11355'; 60 shots; Slick water frac; Avg treating 7417 psi@ 83 bpm; 106,318 #100 mesh; 316,778 #s 30/50 mesh; 9831 bbl water, 0 bbl treated water

Stg 6 Marcellus; 10828'-11050'; 60 shots; Slick water frac; Avg treating 7446 psi@ 82 bpm; 106,378 #100 mesh; 317,795 #s 30/50 mesh; 9848 bbl water, 0 bbl treated water

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

See attached sheet.

Brennan Unit A 7H	47-049-02209	
Formation Name or Type	Top	Bottom
SS,SLT,SH	0	80
SS	80	128
SH	128	140
COAL	140	150
SS,SH	150	170
SH	170	178
SS	178	202
SS,SH	202	460
SH	460	506
SS	506	525
SS,SH	525	700
SH,SS	700	1025
SH	1025	1165
SH,SS	1165	1265
SH	1265	1830
SS	1830	2070
SH	2070	2100
SH,SS	2100	2540
SS	2540	2700
SH	2700	3170
SLTST,SS	3170	3240
SH, SLST	3240	3270
SH, SS, SLTST	3270	3450
SH, SLTST	3450	3690
SH,SS,SLTST	3690	3720
SH, SS, SLTST, LS	3720	3750
SH, SLTST	3750	3810
SH	3810	3870
SH, SLTST	3870	3930
SH, SLTST, LS	3930	3960
SH	3960	4410
SH, SLTST	4410	4520
SH	4520	5070
SH, SLTST, SS	5070	5120
SH, SLTST	5120	5190
SH	5190	7550
SH, LS	7550	7620
LS, SH	7620	7700
SH,LS	7700	7750
SH	7750	7770
SH,. LS	7770	7800
SH	7800	7980
SH, LS	7980	8030
SH,	8030	8080
SH, LS	8080	8100
SH	8100	10670
SH, LS	10670	10750
SH	10750	12646

BRENNAN A 7H

49-2209

FORMATION	TVD
BIG INJUN*	1955
BIG INJUN BASE*	2021
GREENBRIER*	2051
GREENBRIER BASE*	2085
SQUAW*	2094
SQUAW BASE*	2105
GANTZ*	2493
GANTZ BASE*	2510
50FT*	2541
50FT BASE*	2639
30FT*	2653
30FT BASE*	2702
GORDON*	2721
GORDON BASE*	2747
LWR GORDON*	2853
LWR GORDON BASE*	2896
4TH SAND*	2928
4TH SAND BASE*	2935
5TH SAND*	2987
5TH SAND BASE*	3022
LWR SPEECHLEY*	3607
LWR SPEECH. BASE*	3627
UP BALLTOWN*	3827
UP BALLTOWN BASE*	3840
BALLTOWN*	3891
BALLTOWN BASE*	3922
GENESEO SHALE	7388
GENESEO BASE	7421
TULLY LIMESTONE	7421
TULLY BASE	7472
HAMILTON SHALE	7472
HAMILTON BASE	7532
UPPER MARCELLUS	7532
UP MARCELLUS BASE	7620
PURCELL LIMESTONE	7620
PURCELL BASE	7625
LOWER MARCELLUS	7625
LO MARCELLUS BASE**	7682

* Tops projected from offset log due to air drilling and therefore not logging this section

** Base projected from offset logs due to not actually drilling through this base

Well Name: Brennan Unit A 7H
API # 47-049-02209

49-2209

Preforated Intervals, Fracturing or Stimulating

Stg 7 Marcellus; 10523'-10745'; 60 shots; Slick water frac; Avg treating 7352 psi@ 84 bpm; 106,358 #100 mesh; 300,298 #s 30/50 mesh; 9638 bbl water, 0 bbl treated water
Stg 8 Marcellus; 10218'-10440'; 60 shots; Slick water frac; Avg treating 7510 psi@ 83 bpm; 107,843 #100 mesh; 260,370 #s 30/50 mesh; 9339 bbl water, 0 bbl treated water
Stg 9 Marcellus; 9913 '-10135'; 60 shots; Slick water frac; Avg treating 7161 psi@ 85 bpm; 107,827 #100 mesh; 313,530 #s 30/50 mesh; 9950 bbl water, 0 bbl treated water
Stg 10 Marcellus; 9608'-9830'; 60 shots; Slick water frac; Avg treating 7185 psi@ 83 bpm; 107,259 #100 mesh; 312,494 #s 30/50 mesh; 9964 bbl water, 0 bbl treated water
Stg 11 Marcellus; 9303'-9525'; 60 shots; Slick water frac; Avg treating 7703 psi@ 85 bpm; 106,308 #100 mesh; 318,239 #s 30/50 mesh; 9789 bbl water, 0 bbl treated water
Stg 12 Marcellus; 8998'-9220'; 60 shots; Slick water frac; Avg treating 7344 psi@ 76 bpm; 107,032 #100 mesh; 313,211 #s 30/50 mesh; 10105 bbl water, 0 bbl treated water
Stg 13 Marcellus; 8693'-8915'; 60 shots; Slick water frac; Avg treating 7257 psi@ 77 bpm; 107,021 #100 mesh; 312,458 #s 30/50 mesh; 10024 bbl water, 0 bbl treated water
Stg 14 Marcellus; 8388'-8610'; 60 shots; Slick water frac; Avg treating 7324 psi@ 81 bpm; 107,658 #100 mesh; 313,971 #s 30/50 mesh; 9985 bbl water, 0 bbl treated water
Stg 15 Marcellus; 8083'-8305'; 60 shots; Slick water frac; Avg treating 7451 psi@ 70 bpm; 106,486 #100 mesh; 313,103 #s 30/50 mesh; 10093 bbl water, 0 bbl treated water

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 3/27/2013
API #: 47-4902210

Farm name: Bower, Richard and Jocelyn Operator Well No.: Brennan Unit A 5H

LOCATION: Elevation: 1256 Quadrangle: Mannington 7.5'

District: Lincoln County: Marion
Latitude: 15020 Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 1110 Feet West of 80 Deg. 17 Min. 30 Sec.

Company: XTO Energy Inc

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	20"	40'	40'	CTS
Agent: Gary Beall	13-3/8"	632'	632'	531 sx
Inspector: Bill Hendershot	9-5/8"	3103'	3103'	1041 sx
Date Permit Issued: 5/18/2012	5-1/2"	12006'	12006'	1705 sx
Date Well Work Commenced: 6/18/2012				
Date Well Work Completed: 1/5/2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7626'				
Total Measured Depth (ft): 11,511'				
Fresh Water Depth (ft.): 65'				
Salt Water Depth (ft.): None Noted				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 140'				
Void(s) encountered (N/Y) Depth(s) N				

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OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7520-7655
Gas: Initial open flow N/A MCF/d Oil: Initial open flow ---------- Bbl/d
Final open flow 3219 MCF/d Final open flow ---------- Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3-28-13
Date

49-02210

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, ROP, Directional Survey, Total Gas, Mudlogs

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Stg 1 Marcellus; 11206'-11436'; 60 shots; Slick water frac; Avg treating 7125 psi@ 79 bpm; 111,300 #100 mesh; 326,769 #s 30/50 mesh; 10141 bbl water, 0 bbl treated water

Stg 2 Marcellus; 10886'-111116'; 60 shots; Slick water frac; Avg treating 7623 psi@ 82 bpm; 106,234 #100 mesh; 300,279 #s 30/50 mesh; 9772 bbl water, 0 bbl treated water

Stg 3 Marcellus; 10566'-10796'; 60 shots; Slick water frac; Avg treating 7623 psi@ 82 bpm; 110,195 #100 mesh; 328,735 #s 30/50 mesh; 10315 bbl water, 0 bbl treated water

Stg 4 Marcellus; 10246'-10476'; 60 shots; Slick water frac; Avg treating 7285 psi@ 84 bpm; 109,586 #100 mesh; 328,641 #s 30/50 mesh; 10421 bbl water, 0 bbl treated water

Stg 5 Marcellus; 9926'-10156'; 60 shots; Slick water frac; Avg treating 7433 psi@ 85 bpm; 109,473 #100 mesh; 327,469 #s 30/50 mesh; 10156 bbl water, 0 bbl treated water

Stg 6 Marcellus; 9606'-9836'; 60 shots; Slick water frac; Avg treating 7386 psi@ 84 bpm; 109,656 #100 mesh; 316,069 #s 30/50 mesh; 10075 bbl water, 0 bbl treated water

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

See attached sheet.

Brennan Unit A 5H	47-049-02210	
Formation Name or Type	Top	Bottom
SS,SLT,SH	0	80
SS	80	128
SH	128	140
COAL	140	150
SS,SH	150	170
SH	170	178
SS	178	202
SS,SH	202	460
SH	460	506
SS	506	525
SS,SH	525	630
SS, LS SLST, SH	630	650
SH, SLST, LS, SS	650	680
SH, SLST, SS	680	710
SH, SLST, SS	710	740
SS, SLST	740	770
SH, SLST	770	860
SH, LS, SLST	860	890
SH, SLST	890	980
LS, SH	980	1010
SH, SLST, SS	1010	1040
SLST, SS	1040	1070
SS	1070	1190
SH, SLST	1190	1220
LS, SH, SLST	1220	1250
SH, LS, SS	1250	1360
SH, SS	1360	1420
SS, SH	1420	1510
SS, SH, SLST	1510	1550
SS, SH	1550	1670
SH, SS	1670	1700
SS, SH	1700	1910
SS, SH, LS	1910	2060
SS, SH, SLTST	2060	2090
SH, SS, SLTST	2090	2150
SLTST, SH	2150	2180
SH, SLTST, SS	2180	2270
SH, SLTST	2270	2480
SH, SS	2480	2600
SH, SS, SLTST	2600	2720
SS, SH, SLTST	2720	2780
SH, SLTST, SS	2780	2850
SLTST, SH, SS	2850	2970
SH, SLTST, SS	2970	3050
SH, SS	3050	3130
SH	3130	3220
SH, SLTST	3220	3340
SH, SS, SLTST	3340	3400
SH, SLTST	3400	3640
SH	3640	3790

BRENNAN A 5H

49-2210

FORMATION	TVD
BIG INJUN*	1955
BIG INJUN BASE*	2021
GREENBRIER*	2051
GREENBRIER BASE*	2085
SQUAW*	2094
SQUAW BASE*	2105
GANTZ*	2493
GANTZ BASE*	2510
50FT*	2541
50FT BASE*	2639
30FT*	2653
30FT BASE*	2702
GORDON*	2721
GORDON BASE*	2747
LWR GORDON*	2853
LWR GORDON BASE*	2896
4TH SAND*	2928
4TH SAND BASE*	2935
5TH SAND*	2987
5TH SAND BASE*	3022
LWR SPEECHLEY*	3607
LWR SPEECH. BASE*	3627
UP BALLTOWN*	3827
UP BALLTOWN BASE*	3840
BALLTOWN*	3891
BALLTOWN BASE*	3922
GENESEO SHALE	7378
GENESEO BASE	7411
TULLY LIMESTONE	7411
TULLY BASE	7461
HAMILTON SHALE	7461
HAMILTON BASE	7521
UPPER MARCELLUS	7521
UP MARCELLUS BASE	7611
PURCELL LIMESTONE	7611
PURCELL BASE	7614
LOWER MARCELLUS	7614
LO MARCELLUS BASE**	7671

* Tops projected from offset log due to air drilling and therefore not logging this section

** Base projected from offset logs due to not actually drilling through this base

SH, SLTST	3790	4060
SH	4060	4420
SH, SLTST	4420	4570
SH	4570	5140
SH, SLTST	5140	5290
SH	5290	5770
SH, SLTST	5770	5860
SH	5860	7500
LS, SH	7500	7600
SH, LS	7600	7730
SH	7730	7900
SH, LS	7900	7920
SH	7920	9920
SH, LS	9920	9940
SH	9940	11528

49-2210

Well Name: Brennan Unit A 5H

API # 47-049-02210

Preforated Intervals, Fracturing or Stimulating

Stg 7 Marcellus; 9286'-9516'; 60 shots; Slick water frac; Avg treating 7175 psi@ 83 bpm; 108,674 #100 mesh; 301,576 #s 30/50 mesh; 9985 bbl water, 0 bbl treated water
Stg 8 Marcellus; 8966'-9196'; 60 shots; Slick water frac; Avg treating 7346 psi@ 77 bpm; 107,920 #100 mesh; 316,698 #s 30/50 mesh; 10172 bbl water, 0 bbl treated water
Stg 9 Marcellus; 8646'-8876'; 60 shots; Slick water frac; Avg treating 7318 psi@ 84 bpm; 108,224 #100 mesh; 328,471 #s 30/50 mesh; 10184 bbl water, 0 bbl treated water
Stg 10 Marcellus; 8326'-8556'; 60 shots; Slick water frac; Avg treating 6983 psi@ 77 bpm; 107,871 #100 mesh; 326,649 #s 30/50 mesh; 10139 bbl water, 0 bbl treated water
Stg 11 Marcellus; 8006'-8236'; 60 shots; Slick water frac; Avg treating 7256 psi@ 80 bpm; 108,329 #100 mesh; 328,640 #s 30/50 mesh; 10004 bbl water, 0 bbl treated water

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 6/7/2013
API #: 4704901908

Farm name: Rockwell, Faye C. Operator Well No.: Rockwell 2128

LOCATION: Elevation: 1133' Quadrangle: Shinnston 7.5'

District: Mannington County: Marion
Latitude: 13500' Feet South of 39 Deg. 30' Min. 00" Sec.
Longitude 11540' Feet West of 80 Deg. 20' Min. 00" Sec.

Company: XTO Energy Inc

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	13 3/8"	45'	45'	Sand In
Agent: Gary Beall	9 5/8"	481'	481'	CTS
Inspector: Bill Hatfield	7"	1725'	1725'	CTS
Date Permit Issued: 12/4/2007	4 1/2"	5100'	5047'	247 sks
Date Well Work Commenced: 3/13/2008				
Date Well Work Completed: 3/26/2008				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 5100'				
Total Measured Depth (ft): 5100'				
Fresh Water Depth (ft.): 35'				
Salt Water Depth (ft.): NA				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 364'				
Void(s) encountered (N/Y) Depth(s) N				

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Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation 5th Sand, Balltown, L Balltown, Bradford, Riley Pay zone depth (ft) 2766' - 4676'
Gas: Initial open flow ——— MCF/d Oil: Initial open flow ——— Bbl/d
Final open flow ——— MCF/d Final open flow ——— Bbl/d
Time of open flow between initial and final tests ——— Hours
Static rock Pressure ——— psig (surface pressure) after ——— Hours

Second producing formation ——— Pay zone depth (ft) ———
Gas: Initial open flow ——— MCF/d Oil: Initial open flow ——— Bbl/d
Final open flow ——— MCF/d Final open flow ——— Bbl/d
Time of open flow between initial and final tests ——— Hours
Static rock Pressure ——— psig (surface pressure) after ——— Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

6-7-13
Date

49.01908

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Riley	4670' - 4676'	195 sks sand, 330 bbl water, 77,000 scf N2
Bradford	4172' - 4263'	200 sks sand, 374 bbl water, 141,000 scf N2
L. Balltown	3862' - 3989'	250 sks sand, 368 bbl water, 149,000 scf N2
Balltown	3654' - 3674'	360 sks sand, 543 bbl water, 97,000 scf N2
5th Sand	2766' - 2770'	265 sks sand, 317 bbl water, 100,000 scf CO2

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

Rock	0' - 364'	Water@35'
Coal	364' - 370'	
Sand/Shale	370' - 880'	
Sand	880' - 1005'	
Sand/Shale	1005' - 1680'	
Big Lime	1680' - 1783'	
Big Injun	1783' - 1993'	
Weir	1993' - 2407'	
Gordon	2407' - 2708'	
4th	2708' - 2760'	
5th	2760' - 3128'	
Speechly	3128' - 3650'	
Balltown	3650' - 3983'	
Bradford	3983' - 4860'	
Benson	4860' - 5100'	TD

WR-35
Rev (5-01)

DATE: 3/4/13
API # : 47-035-03000

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: John Morgan Operator Well No.: HR 418

LOCATION: Elevation: 610' Quadrangle: Sandyville WV 7.5'

District: Ravenswood County: Jackson
Latitude: 4611' Feet South of 38 Deg. 57 Min. 30 Sec.
Longitude 360' Feet West of 81 Deg. 37 Min. 30 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1244 Martins Branch Road				
Charleston WV, 25312	20"	32'	32'	N/A
Agent: Marc Scholl	13 3/8"	78'	78'	81ft3 CTS
Inspector: Jamie Stevens	9 5/8"	554'	554'	288 ft3 CTS
Date Permit Issued: 10/27/11	7"	2365'	2365'	536 ft3 CTS
Date Well Work Commenced: 12/3/12	4.5"	6868'	6868'	130 ft3
Date Well Work Completed: 1/8/13				
Verbal Plugging:	Gamma Log from (3445'MD(kop) – 4000'MD, 3925'tvd			
Date Permission granted on:	Ran Gyro Log from (3150' – Surface)			
Rotary x Cable Rig	Run Open hole Log (2387' – Surface) G,D,C,N,Ind			
Total Depth (feet): 7000'TMD, 4100'TVD				
Fresh Water Depth (ft.): 34', 390'				
Salt Water Depth (ft.): 1462', 1886' Water/Gas				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

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WV Department of
Environmental Protection

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4024'MD- 7000'MD
3946'TVD – 4100' TVD
Gas: Initial open flow trace MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow >1 MMCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: ____
By: President
Date: 3/5/2013

35-03000

Formation:	Top:	Bottom:
Soil Sand Shale	0	1590
Salt Sand	1590	1680
Big Lime	1680	1798
Greenbrier Grp	1798	1848
Injun	1848	1965
Shale	1965	2290
Coffee Shale	2290	2313
Berea Sand	2313	2316
Devonian Shale	2316	4100
Lower Huron Section	3970	4100

All depths shown As TVD

12-13-12 Run total of 163 jts 4.5" R-3 11.6ppf N80 casing to depth of 6862' set at 6868' KB. Run 13 Stg Team Hydraulic Set Openhole packer system. Run inflatable packer at 2600'. MIRU Nabors Packer set crew – pressure up to 3200 psi with 117k scf N2. Hold pressure for 10 min for packer operation. RU and perform annular squeeze with 21 bbls type 1 3% CaCl mixed at 15.2ppg. Follow cmt with 2 bbl water.

NOTE: THERE ARE NO PERFORATED INTERVALS IN THIS STYLE OF COMPLETION. THE PACKERS WILL SERVE AS STAGE ISOLATION AND THE BALL ACTIVATED MECHANICAL SLEEVES SERVE AS THE MEANS OF COMMUNICATION FROM WELLBORE TO FORMATION. ALL DEPTHS ARE INDICATED BELOW.

Stage	Sleeve	Sleeve ID	Ball Size	Packer
1	6820.35	HP	N/A	6734.45
2	6607.65	1.594	1.719	6521.75
3	6394.95	1.750	1.875	6309.05
4	6182.65	1.906	2.031	6055.45
5	5928.95	2.063	2.188	5843.05
6	5716.25	2.219	2.344	5630.35
7	5462.25	2.375	2.500	5375.35
8	5250.15	2.535	2.656	5164.25
9	5037.85	2.688	2.831	4951.95
10	4825.55	2.844	2.969	4699.05
11	4573.15	3.036	3.250	4488.05
12	4362.35	3.286	3.530	4235.75
13	4109.95	3.536	3.750	4024.75
Anchor				2600.90

1/7/13 MIRU Nabors. RU and Pump N2 at 5k scf/min and start pressuring up on 4.5" casing to open hydroport sleeve. Up rate to 7k scf/min and pump total of 133k scf N2 to open sleeve at 3800 psi. Wait for Frac Crew

01/08/13 MIRU Nabors Frac Crew. Wellhead pressure at 1186 psi. Start pumping at 30k scf/min on Stg 1 and work rate up to 100k scf/min and pump total of 1MM scf N2. Shut down and load balls and product. Drop 1.719" ball for Stg 2. Pump at 15k scf/min and land ball at 1700 psi and 42k scf. Up rate and open sleeve at 3722psi. Up rate and pump total of 1MM scf N2. Back rate down to 6k scf/min and drop 1.875" ball for Stg 3. Pump ball down at 18k scf/min. Land ball at 2200 psi at 95k scf N2. Up rate and open sleeve at 3982 psi. Up rate and pump total of 1MM scf N2. Back rate down to 5k scf/min and drop 2.031" ball for Stg 4. Repeat Process For Stgs 4 – 13.

35-03000

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Max P	4738	4557	4213	4553	4228	4280	4154
Avg P	4634	4543	4156	4414	4211	4238	4117
Max R	101.8	109.0	103.0	108.0	104.0	104.0	104.0
Avg R	100.1	106.6	102.5	106.7	103.4	102.8	103.5
Shut In	1700-2min	N/A	N/A	1746-2min	1660-5min	N/A	N/A

	Stage 8	Stage 9	Stage 10	Stage 11	Stage 12	Stage 13
Max P	4201	4108	4092	3916	3740	3539
Avg P	4182	4089	4081	3893	3722	3528
Max R	103.0	103.0	104.0	106.0	104.0	103.0
Avg R	102.6	102.6	103.5	105.0	103.5	102.2
Shut In	1633-5min	N/A	1733-2min	N/A	N/A	1517-5min

WR-35
Rev (5-01)

DATE: 3/4/13
API # : 47-053-00547

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Denver And Lura Casto_ Operator Well No.: HR 1003

LOCATION: Elevation: 918' Quadrangle: Mt Alto WV 7.5'

District: Union County: Mason
Latitude: 9392' Feet South of 38 Deg. 47 Min. 30 Sec.
Longitude 249' Feet West of 81 Deg. 52 Min. 30 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1244 Martins Branch Road				
Charleston WV, 25312				
Agent: Marc Scholl	13 3/8"	32'	32'	N/A
Inspector: Jamie Stevens	9 5/8"	795'	795'	408 ft3 CTS
Date Permit Issued: 1/12/12	7"	2532'	2532'	574 ft3 CTS
Date Well Work Commenced: 12/14/12	4.5"	7572'	7572'	Ft3
Date Well Work Completed: 1/1/13				
Verbal Plugging:	Gamma Log from (3255'MD(kop) – 4160'MD, 3921'tvd)			
Date Permission granted on:	Ran Gyro Log from (3200' – Surface)			
Rotary x Cable Rig				
Total Depth (feet): 7691'TMD, 3990'TVD				
Fresh Water Depth (ft.): None observed				
Salt Water Depth (ft.): 1146', 1800'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

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APR 08 2013

WV Department of
Environmental Protection

OPEN FLOW DATA

Producing formation Lower Huron_Shale Pay zone depth (ft) 3760'MD – 7691'MD
3785'TVD – 3990' TVD

Gas: Initial open flow 1000 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MMCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: _____
By: President
Date: 3/5/2013

53-00547

Formation:	Top:	Bottom:
Soil/Sand/Shale	0	1747
Salt Sand	1747	1823
Big Lime	1823	1955
Injun/Squaw	1955	2108
Shale	2108	2448
Berea Sand	2448	2463
Devonian Shale	2463	3990
Lower Huron Section	3785	3990

All depths shown As TVD

1/1/13 Run total of 181 jts of 4.5" 11.6ppf M80 R-3 4.5" casing to depth of 7566'set at 7572' KB. Run pump out guide shoe, and run 10' pup jt at 2973'. Land casing hanger, and NU wellhead and 5k 4.5" valve. MIRU Nabors. Pressure test iron and start pumping ball to pump out shoe. Pressure up to approx. 950 psi and pressure dropped indicating that shoe opened. Pressure fell back to 320 psi and held. – **Produce through 4.5" casing - will test as natural producer.**

WR-35
Rev (5-01)

DATE: 3/5/13
API # : 47-087-04720

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Linda Sue Peffer_ Operator Well No.: HR 482

LOCATION: Elevation: 760' Quadrangle: Peniel WV 7.5'

District: Reedy County: Roane
Latitude: 10017' Feet South of 38 Deg. 52 Min. 30 Sec.
Longitude 2519' Feet West of 81 Deg. 25 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1244 Martins Branch Road				
Charleston WV, 25312				
Agent: Marc Scholl	13 3/8"	42'	42'	N/A
Inspector: Ed Gainer	9 5/8"	616'	616'	312ft3 CTS
Date Permit Issued: 7/30/2012	7"	2452'	2452'	580ft3 CTS
Date Well Work Commenced: 1/3/13	4.5"	7871'	7871'	130 ft3
Date Well Work Completed: 1/29/13				
Verbal Plugging:	Gamma Log from (3555'MD(kop) – 4760'MD , 4248'TVD			
Date Permission granted on:	Ran Gyro Log from (3501' – Surface)			
Rotary x Cable Rig				
Total Depth (feet): 7932'TMD, 4249'TVD				
Fresh Water Depth (ft.): 230'				
Salt Water Depth (ft.): 1133',1522',1990'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

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OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4372'MD- 7932'MD
4170'TVD – 4249' TVD
Gas: Initial open flow 50 MCF/d Oil: Initial open flow Bbl/d
Final open flow >2 MMCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: James J. Peffer Jr.
By: President
Date: 3/6/2013

87-04720

Formation:	Top:	Bottom:
Soil/Sand/Shale	0	1597
Salt Sand	1597	2040
Big Lime	Didn't See	
Injun/Squaw	Didn't See	
Weir	2307	2317
Coffee Shale	2357	2369
Devonian Shale	2369	4249 td
Lower Huron Section	4192	4249 td

All depths shown As TVD

1/17/13 Run 16 stg Packers Plus Hydraulic set open hole packer system. Run casing to depth of 7865' set at 7871' KB. Run total of 174 jts of R-3 4.5" 11.6ppf M-80 casing .

1/18/13 RU to Casing and pump small volume water and drop balls for Toe Sub. Start pumping N2 and pressure up to 3200psi- Stop pumping and hold pressure for 20min for packer operation. Bleed pressure back to 600psi and Perform annular squeeze on 4.5" casing with 100sx at 15ppg – follow with 2bbl water.

NOTE: THERE ARE NO PERFORATED INTERVALS IN THIS STYLE OF COMPLETION. THE PACKERS WILL SERVE AS STAGE ISOLATION AND THE BALL ACTIVATED MECHANICAL SLEEVES SERVE AS THE MEANS OF COMMUNICATION FROM WELLBORE TO FORMATION. ALL DEPTHS ARE INDICATED BELOW.

Stage	Sleeve	Sleeve ID	Ball Size	Packer
1	7764.41	HP	N/A	7667.84
2	7576.95	1.250	1.500	7480.38
3	7346.19	1.500	1.750	7249.72
4	7114.73	1.750	1.875	7018.16
5	6883.07	1.875	2.000	6786.60
6	6695.61	2.000	2.125	6599.14
7	6464.05	2.125	2.250	6367.58
8	6232.49	2.250	2.375	6135.92
9	6000.83	2.375	2.500	5904.26
10	5813.37	2.500	2.625	5716.80
11	5581.71	2.625	2.750	5485.14
12	5349.95	2.750	2.875	5253.78
13	5118.59	2.875	3.000	5022.12
14	4867.46	3.000	3.125	4790.89
15	4656.3	3.250	3.500	4559.73
16	4468.84	3.500	3.750	4372.27
Anchor				2688.60

01/28/13 -1/29/13 Start pumping on Stg 1 at 26k scf/min. pressure up to 4631 psi, and open hydroport sleeve. Continue pumping and increase rate to 100k scf/min. Pump total of 1MM scf N2. Shut down and drop 1.5" ball for Stg 2. Start pumping ball to seat at 17k scf/min. Land ball at 130k scf. Up rate and open sleeve at 4676 psi. Continue to increase rate and pump total of 1MM scf N2. Shut down and drop 1.75" ball for Stg 3. Start pumping ball down at 19k scf/min and land ball at 135k scf. Up rate and open sleeve at 4709 psi. Continue to increase rate and pump total of 1MM scf N2. Back rate down and drop 1.875" ball for Stg 4. Repeat fracturing process for Stgs 4 – 16.

87-04720

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8
Max P	5539	5419	5222	4828	4827	4919	4919	4661
Avg P	4776	5301	5106	4746	4781	4858	4815	4613
Max R	103.0	94.0	106.0	102.0	104.0	103.0	101.0	98.0
Avg R	99.1	91.8	102.3	101.1	102.0	102.5	100.0	96.7
Shut In	N/A	2418-5min	N/A	2300-2min	2200-5min	2275-5min	N/A	N/A

	Stage 9	Stage 10	Stage 11	Stage 12	Stage 13	Stage 14	Stage 15	Stage 16
Max P	4716	4777	4235	4260	4094	4459	4349	4270
Avg P	4625	4735	4192	4237	4074	4439	4313	4250
Max R	105.0	103.0	104.0	107.0	102.0	104.0	104.0	105.0
Avg R	103.0	102.8	102.0	105.0	101.0	102.0	102.5	104.0
Shut In	2040-5min	N/A	2062-5min	N/A	2194-2min	N/A	N/A	2108-5min

WR-35
Rev (5-01)

DATE: 3/5/13
API # : 47-087-04726

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: John Ellison Operator Well No.: HR 476

LOCATION: Elevation: 686' Quadrangle: Reedy WV 7.5'

District: Reedy County: Roane
Latitude: 6647' Feet South of 38 Deg. 55 Min. 00 Sec.
Longitude 10921' Feet West of 81 Deg. 25 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1244 Martins Branch Road				
Charleston WV, 25312	20"	15'	15'	N/A
Agent: Marc Scholl	13 3/8"	78'	78'	CTS
Inspector: Ed Gainer	9 5/8"	612'	612'	312ft3 CTS
Date Permit Issued: 12/18/12	7"	2343'	2343'	528ft3 CTS
Date Well Work Commenced: 1/18/13	4.5"	7054'	7054'	130 ft3
Date Well Work Completed: 2/8/13				
Verbal Plugging:	Gamma Log from (3530'MD(kop) – 4690'MD , 4242'TVD			
Date Permission granted on:	Ran Gyro Log from (3500' – Surface)			
Rotary x Cable Rig				
Total Depth (feet): 7144'TMD, 4274'TVD				
Fresh Water Depth (ft.): 40',260'				
Salt Water Depth (ft.): 1269',1830'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

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APR 0 8 2013
WV Department of
Environmental Protection

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4127'MD- 7144'MD
4055'TVD – 4274' TVD
Gas: Initial open flow 1000 MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MMCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: James Taylor
By: President
Date: 3/6/2013

87-04726

Formation:	Top:	Bottom:
Soil/Sand/Shale	0	1648
Salt Sand	1648	1830
Injun/Squaw	1830	1868
Shale	1868	2261
Coffee Shale	2261	2276
Berea	2276	2278
Devonian Shale	2278	4274 td
Lower Huron Section	4084	4274 td

All depths shown As TVD

1/28/13 Run 156 jts 4.5" M-80 R-3 11.6ppf casing to depth of 7054' KB. Run Peake Completions 13 stg open hole hydraulic set packer system with casing anchor packer inside casing. MIRU Nabors packer set crew. Start pumping 1" ball to shoe and pressure up to 2130 psi. Held pressure for Packer operation. Packers shut off gas rate on 7". RD N2 and RU to perform annular squeeze on 4.5" casing. Pump 100sx type 1 3% CaCl cmt on top packer

NOTE: THERE ARE NO PERFORATED INTERVALS IN THIS STYLE OF COMPLETION. THE PACKERS WILL SERVE AS STAGE ISOLATION AND THE BALL ACTIVATED MECHANICAL SLEEVES SERVE AS THE MEANS OF COMMUNICATION FROM WELLBORE TO FORMATION. ALL DEPTHS ARE INDICATED BELOW.

Stage	Sleeve	Sleeve ID	Ball Size	Packer
1	7054.00	P/O Shoe	N/A	6913.74
2	6777.64	1.15	1.250	6681.62
3	6545.62	1.28	1.375	6449.55
4	6313.55	1.40	1.500	6217.53
5	6081.43	1.53	1.758	5985.31
6	5849.36	1.78	2.000	5753.29
7	5617.29	2.03	2.250	5521.07
8	5385.07	2.28	2.500	5289.05
9	5153.00	2.53	2.750	5056.93
10	4920.83	2.78	3.000	4824.81
11	4688.71	3.03	3.250	4592.54
12	4456.39	3.28	3.500	4360.17
13	4223.92	3.53	3.750	4127.80
Anchor				2259.10

02/07/13 -02/8/13 . Start pumping N2 at 15k scf/min, take pressure to 3500 psi, and hold pressure for approx. 5 min for Stg 1. Start pumping at 15k scf/min and open shoe up at 5108 psi. Slowly work rate up to 75k scf/min. pumped total of 1.3MM scf N2. Shut down. Drop 1.25" ball for Stg 2. Land at 121k scf at 18k scf/min. Up rate and open sleeve at 4014 psi. Up rate and pump total of 1MM scf N2. Shut down and load 1.375" ball for Stg 3. Start pumping ball down at 18k scf/min. Land ball approx. 115k scf. Up rate and open sleeve at 4058 psi. Up rate and pump total of 1MM scf N2. Shut down and load and drop 1.5" ball for Stg 4. Load product. Start pumping at 5:30pm at 18k scf/min. Land ball at 47k scf. Up rate and open sleeve at 3790 psi. Up rate and pump total of 1MM scf N2. Shut down. Drop 1.75" ball for Stg 5. Repeat Process For Stgs 5 – 13

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Max P	5789	5649	5013	4597	4454	4341	4133
Avg P	5213	5513	4858	4433	4122	4247	3985
Max R	95.3	96.0	106.0	107.0	110.0	109.0	108.0
Avg R	88.9	93.0	104.0	105.0	104.3	107.0	104.0
Shut In	2822-0min	2868-0min	1794-5min	1835-5min	N/A	1927-5min	N/A

	Stage 8	Stage 9	Stage 10	Stage 11	Stage 12	Stage 13
Max P	4271	4830	4132	3948	4182	3792
Avg P	4179	4777	3981	3916	4019	3635
Max R	107.0	108.0	115.0	104.0	105.0	102.0
Avg R	105.0	107.0	105.0	102.0	101.0	101.0
Shut In	N/A	2083-5min	N/A	1805-5min	N/A	1825-5min

87-04724

WR-35
Rev (5-01)

DATE: 3/4/13
API # : 47-035-03001

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Warren And Janet Myers Operator Well No.: HR 455

LOCATION: Elevation: 975' Quadrangle: Liverpool WV 7.5'

District: Ravenswood County: Jackson
Latitude: 5406' Feet South of 38 Deg. 57 Min. 30 Sec.
Longitude 5099' Feet West of 81 Deg. 35 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1244 Martins Branch Road				
Charleston WV, 25312				
Agent: Marc Scholl	13 3/8"	31'	31'	N/A
Inspector: Jamie Stevens	9 5/8"	934'	934'	456 ft3 CTS
Date Permit Issued: 11-16-2011	7"	2715'	2715'	602 ft3 CTS
Date Well Work Commenced: 10/25/12	4.5"	7684'	7684	130 ft3
Date Well Work Completed: 11/13/12				
Verbal Plugging:	Gamma Log from (3755'MD(kop) – 4700'MD (Land curve)			
Date Permission granted on:	Ran Gyro Log from (3650' – Surface)			
Rotary x Cable Rig				
Total Depth (feet): 7747'TMD, 4417'TVD				
Fresh Water Depth (ft.): 893'				
Salt Water Depth (ft.): 1589', 1980', 2048'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

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Environmental Protection

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4505'MD- 7747'MD
4374'TVD – 4417' TVD
Gas: Initial open flow 50 MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow >1 MMCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: James [illegible]
By: President
Date: 3/5/2013

35 03001

Formation:	Top:	Bottom:
Soil Sand Shale	0	1980
Salt Sand	1980	2230
Big Lime	2230	2270
Injun	2270	2315
Shale	2315	2650
Coffee Shale	2650	2670
Berea Sand	2670	2672
Devonian Shale	2672	TD
Lower Huron Section	4320	4417

All depths shown As TVD

11/6/12 Run 4.5" 11.6ppf N-80 casing to depth of 7678' set at 7684' KB With 14 stg Team Completion Hydraulic set openhole packer system. MIRU Nabors packer set crew. Pressure casing up to approx. 2000 psi and gas rate shut off. Continue pumping N2 for total of 160k scf and open hydroport frac sleeve at 3910 psi. Shut well in. RU and and perform annular squeeze on 4.5" with 100sx cmt at 15ppg.

NOTE: THERE ARE NO PERFORATED INTERVALS IN THIS STYLE OF COMPLETION. THE PACKERS WILL SERVE AS STAGE ISOLATION AND THE BALL ACTIVATED MECHANICAL SLEEVES SERVE AS THE MEANS OF COMMUNICATION FROM WELLBORE TO FORMATION. ALL DEPTHS ARE INDICATED BELOW.

Stage	Sleeve	Sleeve ID	Ball Size	Packer
1	7592.00	HP	N/A	7501.10
2	7368.20	1.438	1.563	7277.10
3	7142.50	1.594	1.719	7051.90
4	6917.30	1.750	1.875	6826.20
5	6699.80	1.906	2.031	6608.75
6	6476.85	2.063	2.188	6351.95
7	6214.45	2.219	2.344	6127.10
8	5999.50	2.375	2.500	5909.40
9	5780.70	2.531	2.656	5655.00
10	5520.40	2.688	2.813	5429.30
11	5299.20	2.844	2.969	5166.80
12	5035.80	3.036	3.250	4944.70
13	4813.50	3.286	3.500	4722.40
14	4587.80	3.536	3.750	4505.30
Anchor				2918.00

11/12/12 MIRU Nabors Stim crew. Casing pressure at 1217 psi. Start pumping at half rate (50k scf/min) on Stg 1 and slowly increase rate to design. Pump total of 1MM scf N2. Shut down and drop 1.563" ball for Stg 2. Start pumping ball down at 17k scf/min. Land ball at 100k scf. Up rate and open sleeve at 4043 psi. Increase rate to 100k scf/min. Pump total of 1MM scf N2. Shut down and bleed lines. Load and drop 1.719" ball for Stg 3. Start pumping ball to sleeve at 21k scf/min. Land ball at 100k scf. Up rate and open sleeve at 4033 psi. Increase rate and pump total of 1MM scf N2. Back rate off and drop 1.875" ball for Stg 4. Repeat process for Stgs 4 – 14.

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Max P	4964	4650	4377	4817	4175	4103	4018
Avg P	4765	4536	4299	4276	4136	4061	3999
Max R	105.6	106.0	101.6	106.0	102.0	104.0	102.0
Avg R	103.1	103.6	100.7	103.9	101.7	102.8	101.1
Shut In	1700-5m	1770-5m	N/A	1805-5m	1804-5m	N/A	N/A

	Stage 8	Stage 9	Stage 10	Stage 11	Stage 12	Stage 13	Stage 14
Max P	4001	4156	3919	4092	3850	3889	3920
Avg P	3976	4105	3777	4052	3841	3865	3895
Max R	102.0	105.0	103.0	106.0	104.0	107.0	108.0
Avg R	101.9	103.0	101.8	104.9	103.8	106.4	106.3
Shut In	1778-5m	N/A	N/A	1871	N/A	N/A	1850-5m

35.03001

WR-35
Rev (8-10)

01/25/2013
API # 47-033-04877 F V

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm name: BURNSIDE, WILLIAM Operator Well No.: HIRAM LYNCH 102

LOCATION: Elevation: 1,117' Quadrangle: WOLF SUMMIT 7.5'

District: TEN MILE County: HARRISON
Latitude: 2,860 Feet south of 39 Deg 17 Min 30 Sec.
Longitude: 11,515 Feet west of 80 Deg 27 Min 30 Sec.

Company Address:	HG Energy 5260 DuPont Rd Parkersburg, WV 26101	Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Inspector:	Tristan Jenkins				
Date Permit Issued:	01/25/2013				
Date Well Work Commenced:	03/18/2013				
Date Well Work Completed:	03/20/2013				
Verbal Plugging:					
Date Permission Granted On:					
Rotary X Cable	Rig	7"	450'	450'	existing
Total vertical Depth (ft):	2930'				
Total Measured Depth (ft):	2930'				
Fresh Water Depth (ft):	None	4 ½"	2898.5'	2898.5'	existing
Salt Water Depth (ft):	None				
Is Coal being mined in ares (Y/N)?	No				
Coal Depths (ft):	None				
Void(s) encountered (Y/N) depth(s):					

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APR 01 2013

WV Department of
Environmental Protection

OPEN FLOW DATA * Waterflood Injector

Producing formation Fifth Sand Pay zone depth (ft) 2774'-2786'
Gas: Initial open flow * MCF/d Oil: Initial open flow * Bbl/d
Final open flow * MCF/d Final open flow * Bbl/d
Time of open flow between initial and final tests * Hours
Static rock pressure * psig (surface pressure) after * Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3/28/13
Date

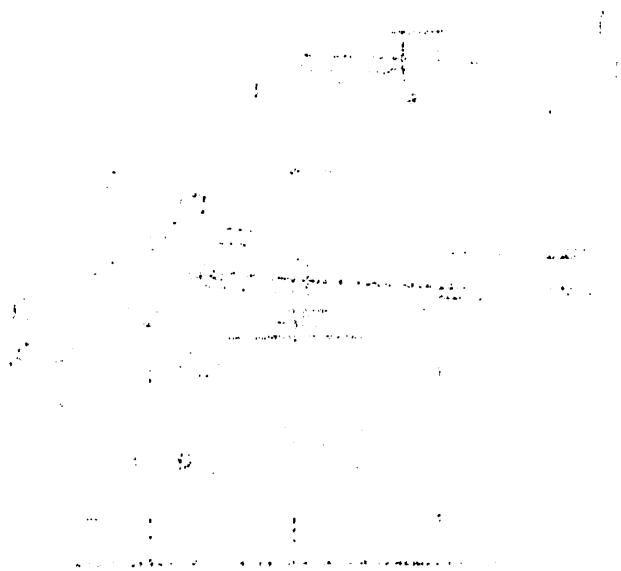
Were core samples taken? No Were cuttings caught during drilling? No 33-04877F

Were Y Electrical, N Mechanical, N or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Treatment : Treated perfs 2774'- 2786' w/ 500 gals 15% HCL, 338 bbls cross linked gel, & 15,000# 20/40 Econoprop.

Well Log : See original well record



WR-35
Rev (8-10)

02/14/2012
API # 47-033-04880 F

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm name: EAST RESOURCES Operator Well No.: HIRAM LYNCH 115

LOCATION: Elevation: 1,002' Quadrangle: WOLF SUMMIT 7.5'

District: TEN MILE County: HARRISON
Latitude: 2,625 Feet south of 39 Deg 17 Min 30 Sec.
Longitude: 7,875 Feet west of 80 Deg 27 Min 30 Sec.

Company Address:	HG Energy 5260 DuPont Road Parkersburg, WV 26101	Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Inspector:	Tristan Jenkins				
Date Permit Issued:	02/14/2012				
Date Well Work Commenced:	03/18/2013				
Date Well Work Completed:	03/20/2013				
Verbal Plugging:					
Date Permission Granted On:					
Rotary X Cable	Rig	7"	418'	418'	existing
Total vertical Depth (ft):	2720'				
Total Measured Depth (ft):	2720'				
Fresh Water Depth (ft):	120'	4 ½"	2641.3'	2641.3'	existing
Salt Water Depth (ft):	1540'				
Is Coal being mined in ares (Y/N)?	No				
Coal Depths (ft):	None				
Void(s) encountered (Y/N) depth(s):					

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APR 01 2013
WV Department of
Environmental Protection

OPEN FLOW DATA * Waterflood Injector

Producing formation Fifth Sand Pay zone depth (ft) 2567'-2572' 2573.5'-2577.5'
Gas: Initial open flow * MCF/d Oil: Initial open flow * Bbl/d
Final open flow * MCF/d Final open flow * Bbl/d
Time of open flow between initial and final tests * Hours
Static rock pressure * psig (surface pressure) after * Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3/26/13
Date

Were core samples taken? No

Were cuttings caught during drilling? No 33.04880F

Were Y Electrical, N Mechanical, N or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Treatment : Treated perfs 2567'-2572' and 2573.5'-2577.5' w/ 500 gals 15% HCL, 224 bbls cross linked gel, & 6300 # 20/40 Econoprop.

Well Log : See original well record

WR-35
Rev (8-10)

01/25/2013
API # 47-033-05053 F

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm name: JUNKINS, EARL AND BELVA S. Operator Well No.: HIRAM LYNCH 113

LOCATION: Elevation: 1,080' Quadrangle: WOLF SUMMIT 7.5'

District: TEN MILE County: HARRISON
Latitude: 3,320 Feet south of 39 Deg 17 Min 30 Sec.
Longitude: 8,445 Feet west of 80 Deg 27 Min 30 Sec.

Company Address:	HG Energy 5260 DuPont Rd Parkersburg, WV 26101	Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Inspector:	Tristan Jenkins				
Date Permit Issued:	01/25/2013				
Date Well Work Commenced:	03/19/2013				
Date Well Work Completed:	03/20/2013				
Verbal Plugging:					
Date Permission Granted On:					
Rotary X Cable	Rig	7"	422'	422'	existing
Total vertical Depth (ft):	3122'				
Total Measured Depth (ft):	3122'				
Fresh Water Depth (ft):	52', 390'	4 ½"	3074.25'	3074.25'	existing
Salt Water Depth (ft):	None				
Is Coal being mined in ares (Y/N)?	No				
Coal Depths (ft):	None				
Void(s) encountered (Y/N) depth(s):					

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Office of Oil & Gas
APR 01 2013
WV Department of
Environmental Protection

OPEN FLOW DATA * Waterflood Injector

Producing formation Fifth Sand Pay zone depth (ft) 2998'-3012'
Gas: Initial open flow * MCF/d Oil: Initial open flow * Bbl/d
Final open flow * MCF/d Final open flow * Bbl/d
Time of open flow between initial and final tests * Hours
Static rock pressure * psig (surface pressure) after * Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3/26/13
Date

Were core samples taken? No Were cuttings caught during drilling? No 33-05053F

Were Y Electrical, N Mechanical, N or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Treatment : Treated perfs 2998'-3012' w/ 500 gals 15% HCL, 336 bbls cross linked gel, & 15,000# 20/40 Econoprop.

Well Log : See original well record

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2/4/13
API #: 021-5753

Farm name: LARRY B. CHAPMAN Operator Well No.: F. W. BELL #9

LOCATION: Elevation: 1039' Quadrangle: GLENVILLE

District: DEKALB County: GILMER
Latitude: 10675' Feet South of 39 Deg. 00 Min. 00 Sec.
Longitude 10250' Feet West of 80 Deg. 50 Min. 00 Sec.

Company: ROY G. HILDRETH AND SON, INC.

Address: P. O. BOX 1007	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
SPENCER, WV 25276	7"	300'	300'	CTS
Agent: ROY G. HILDRETH	4 1/2"	2216'	2216'	TOP CEMENT 1342'
Inspector: JOE MCCOURT				130 CU FT
Date Permit Issued: 7/24/2012				
Date Well Work Commenced: 9/1/12				
Date Well Work Completed: 9/21/12				
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 2238'				
Total Measured Depth (ft): N/A				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? NO				
Coal Depths (ft.): N/A				
Void(s) encountered (N/Y) Depth(s) N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation WIER Pay zone depth (ft) 2040' - 2044' (2065' - 2068')
Wier
Gas: Initial open flow SHOW MCF/d Oil: Initial open flow SHOW Bbl/d
Final open flow 200 MCF/d Final open flow 5 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation MAXON Pay zone depth (ft) 1692' - 1713'
Gas: Initial open flow SHOW MCF/d Oil: Initial open flow SHOW Bbl/d
Final open flow 200 MCF/d Final open flow 5 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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Office of Oil and Gas
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WV Department of Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Jon R. McClanahan
Signature

2/14/13
Date

21-5753

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes X_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list ELECTRICAL

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

PLUG SET 1620'	WIER 2080' - 2083' (3 HOLES)	PERF 1515' (1 HOLE)
PERF 1692'- 1713' (25 HOLES)	WIER 2132' (1 HOLE)	PERF 1580' (1 HOLE)
PERF 1738' - 1741' (8 HOLES)	PERF 1407' - 1411' (5 HOLES)	
PLUG SET 1770'	PERF 1435' - 1439' (5 HOLES)	
PERF 1940' - 1942' (2 HOLES)	PERF 1466' (2 HOLES)	
WIER 2040' - 2044' (5 HOLES)	PERF 1478' (1 HOLE)	

Plug Back Details Including Plug Type and Depth(s): FOAM FRAC 20000 LBS EACH 500 GAL ACID EACH

Formations Encountered: Top Depth / Bottom Depth

Surface:

SLATE & SHALE	0' - 1100'	INJUN	1856' - 1900'
SALT SAND	1100' - 1150'	SLATE & SHALE	1900' - 2020'
SLATE & SHALE	1150' - 1210'	WIER	2020' - 2145'
SALT SAND	1210' - 1260'	SLATE & SHALE	2145' - 2238'
SLATE & SHALE	1260' - 1280'		
SALT SAND	1280' - 1320'		
SLATE & SHALE	1320' - 1380'		
SALT SAND	1380' - 1489'		
SLATE & SHALE	1489' - 1510'		
LIME	1510' - 1530'		
SLATE & SHALE	1530' - 1670'		
MAXON	1670' - 1710'		
LIME	1710' - 1740'		
SLATE & SHALE	1740' - 1760'		
BIG LIME	1760' - 1856'		F. W. BELL #9